Access DB# 53/3/

# **SEARCH REQUEST FORM**

# Scientific and Technical Information Center

Requester's Full Name: And And Art Unit: 2172 Phone No Mail Box and Bldg/Room Location:	umber 30 5	- 2358	Serial	Number:	191465431	
If more than one search is submit						*****
Please provide a detailed statement of the se Include the elected species or structures, ke utility of the invention. Define any terms the known. Please attach a copy of the cover sh	ywords, synon nat may have a	nyms, acrony a special mea	ms, and regis ning. Give e	try numbers,	and combine with the cor	ncept or
Title of Invention:						
Inventors (please provide full names):						
Earliest Priority Filing Date:		·	•			
*For Sequence Searches Only* Please include appropriate serial number.				ivisional, or iss	ued patent numbers) along	with the
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PTO-1590 (1-2000) 17-5		F	03	•		

File 350:Derwent WPIX 196 2001/UD, UM &UP=200159 (c) 2001 Derwent hfo Ltd File 347: JAPIO OCT 1976-2001/JUN (UPDATED 011001) (c) 2001 JPO & JAPIO File 344: CHINESE PATENTS ABS APR 1985-2001/Aug (c) 2001 EUROPEAN PATENT OFFICE Set Items Description S1 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT-21627 E? OR REPLACEMENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DA-TA OR FILE OR FILES OR RAID? ? OR DISK(2N) ARRAY?) S2 TIMESTAMP? OR (TIME OR DAY OR DATE OR HOUR? ? OR MINUTE? ?-)(3N)(STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? OR WRIT-E? OR WRITTEN OR WRITING OR REGISTER? OR INDICAT?) 783808 (REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM) OR -S3 FILL??? OR FULL OR USED()UP \$4 18 S1 AND S2 AND S3 S5 17 S4 NOT SEWAGE/TI

DIALOG(R) File 350: Derwent PIX

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013881271

WPI Acc No: 2001-365483/200138

XRPX Acc No: N01-266465

HDD data integrity and performance enhancement via redundant

recording in the head load/unload zone

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week RD 443155 A 20010310 RD 2001443155 A 20010220 200138 B

Priority Applications (No Type Date): RD 2001443155 A 20010220

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

RD 443155 A G11B-000/00

Abstract (Basic): RD 443155 A

NOVELTY - Disclosed is a method allowing full usage of the load/unload zone and also serving as a secondary read cache with potential for improved seek and latency performance. Current Hard Disk Drives (HDDs) utilizing load/unload technology (eg. ramp load/unload on mobile and IBS's recent server HDDs) do not record data in the zone at the outer diameter (OD) of the recording disks that lies underneath the area where the recording heads are unloaded. The zone is not used due to the concern that the heads may contact the disk during the load or unload operation, which could lead to permanent data loss from disk media damage or thermal erasure. Although the probability of head-disk contact during load/unload is fairly low with the present technology, it is finite and poses a tangible risk with respect to the integrity of customer data . The solution is to use redundant data recording within this zone (eg. writing data twice, 180 degrees apart; or three times, 120 degrees apart, etc.) to insure that any data loss due to a localized head-disk incident can be recovered by simply reading the redundant copy of data on the same track. The advantages of this proposal include: 1) Efficient use of currently unusable prime recording real estate. The OD of the disk is the most efficient recording zone and the load/unload zone, which is typically larger than the slider width, could represent a loss of up to 5% of the potential recording area per disk. For a multidisk drive this loss is substantial. 2) Significant improvement in read performance. The latency during read operations is effectively reduced by a factor equal to the number of redundant recordings of the data . 3) Potential seek performance improvement. If the load/unload zone is used as a secondary read cache with the data written primarily to the standard disk area, then any subsequent request for the data would trigger a comparison of which track (the primary or the secondary load/unload track) can be reached quicker and also factor in the improved latency of the redundant recording for the optimum device time. 4) A cache strategy can be implemented to target customer data that is most likely to be invoked (eg. most recent data stored, FIFO, etc.). Writing data to this zone can be scheduled during quiescent periods from solid state write cache or from the primary storage track(s) on the disk. This strategy would reduce substantially any customer perceived performance hit due to redundant recording. With this proposed method, using the load/unload zone for recording data with redundancy provides a significant improvement in data robustness against loss due to localized head-disk contact. To illustrate this, let P(a) be the probability that data is lost on a track at position a due to head-disk contact. Since head-disk contact is a random, independent event, the probability of a head-disk contact is uniform. To lose data permanently, a second head contact must occur at the position a + 180 degrees for a twice redundant recording. Likewise, head-disk contact would have to occur two more times at a + 120 degrees and a + 240 degrees for permanent data loss for a three time redundant

recording scheme. Sing these events are all uniform a mutually independent, the join probability from permanent data oss is given by: P loss=P(a) where n is the number of redundant recordings. Experience has shown that typical head-disk contact with ramp load/unload technology a very low. For example, over a period of 100 load/unload cycles, P(a) is assumed to be on the order of 10. For a twice redundant recording method, the P loss is 10 to part of 14, a number close to a HDD's typical hard error rate. Therefore, using this method of redundant data recording in the ramp load/unload zone provides better utilization of a HDD's OD area, with the potential for improved seek and latency performance.

USE - None given. pp; 0 DwgNo 0/0

Title Terms: DATA; INTEGRITY; PERFORMANCE; ENHANCE; REDUNDANT; RECORD; HEAD

; LOAD; UNLOAD; ZONE

Derwent Class: T03

International Patent Class (Main): G11B-000/00

File Segment: EPI

# 5/5/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

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012280841 \*\*Image available\*\* WPI Acc No: 1999-086947/199908

XRPX Acc No: N99-063341

Information recording method for optical card - involves recording data to free space of data area and corresponding alternate information to management area, when determined that there is free space in data area

Patent Assignee: CANON KK (CANO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 10320924 A 19981204 JP 97131007 A 19970521 199908 B

Priority Applications (No Type Date): JP 97131007 A 19970521

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 10320924 A 12 G11B-020/12

Abstract (Basic): JP 10320924 A

The method involves using an optical card (1) which has a data area and alternative area for recording data, and a management area (4) for recording alternate information containing substitution origin and end addresses. When the data area is **full**, data are recorded in a free space of the alternative area and corresponding alternate information are recorded in the management area.

When the alternative area is **full**, it is determined whether there is any free space in the data area. Data are recorded in the free space of the data area and corresponding alternation information is recorded to the management area when determined that there is free space in the data area.

ADVANTAGE - Shortens SCSI command executing time . Performs alternative information recording simply.

Dwg.2/14

Title Terms: INFORMATION; RECORD; METHOD; OPTICAL; CARD; RECORD; DATA; FREE; SPACE; DATA; AREA; CORRESPOND; ALTERNATE; INFORMATION; MANAGEMENT; AREA; DETERMINE; FREE; SPACE; DATA; AREA

Derwent Class: T03; W04

International Patent Class (Main): G11B-020/12

International Patent Class (Additional): G11B-007/00; G11B-019/02;

G11B-020/10; G11B-027/00

File Segment: EPI

# 5/5/3 (Item 3 from file: 350) DIALOG(R) File 350: Derwent WPIX

.(c) 2001 Derwent Info Ltd All rts. reserv. 011815896 \*\*Image available\*\* WPI Acc No: 1998-232806/199821 XRPX Acc No: N98-184441 Method of retroactively backing file in computer system up involves timestamping new save set with date corresponding to backup date of most recent one of identified save sets having files eligible for backup Patent Assignee: DIGITAL EQUIP CORP (DIGI Inventor: SAXON P D Number of Countries: 024 Number of Patents: 002 Patent Family: Patent No Kind Date Applicat No Kind Date EP 838758 A2 19980429 EP 97118557 Α 19971024 199821 B US 5758359 Α 19980526 US 96736450 Α 19961024 Priority Applications (No Type Date): US 96736450 A 19961024 Cited Patents: No-SR.Pub Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes EP 838758 A2 E 17 G06F-011/14 Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI US 5758359 Α G06F-017/30 Abstract (Basic): EP 838758 A The method involves establishing a backup schedule employing backup levels with predetermined selection criteria associated. The associated selection criteria operates to define a point through which the backup at the backup level with which the selection criteria is associated is to be taken. Attributes are associated with each save set and each file stored and a backup is scheduled is detected to occur. An established level of the scheduled backup is determined and any save sets created since a last lower level save set or last same level save set are identified if an established level of the scheduled retroactive backup is the lowest level. The selection criteria associated with the established level of the scheduled backup is read. The identified save sets has files eligible for backup by testing the attributes associated with the files against the selection criteria until the selection criteria is satisfied. The new save set is timestamped with a date corresponding to the backup date of the most recent one of the identified save sets having files eligible for backup . ADVANTAGE - Mitigates impact of back-up time associated with normally time-consuming full backup. Dwg.3a/5Title Terms: METHOD; BACKING; UP; FILE; COMPUTER; SYSTEM; NEW; SAVE; SET; DATE; CORRESPOND; DATE; RECENT; ONE; IDENTIFY; SAVE; SET; FILE Derwent Class: T01; U21 International Patent Class (Main): G06F-011/14; G06F-017/30 File Segment: EPI (Item 4 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2001 Derwent Info Ltd. All rts. reserv. \*\*Image available\*\* 010956133 WPI Acc No: 1996-453083/199645 XRPX Acc No: N96-382198 Image data storage method for automatic fee place in highways - involves storing image in mass image memory only after secondary memory is filled with images completely Patent Assignee: HITACHI LTD (HITA ) Number of Countries: 001 Number of Patents: 002 Patent Family: Kind Applicat No Kind Patent No Date Date Week

19960903 JP 9532025

A 19950221

199645 B

JP 8228337

Α

Priority Applications (No Type Date): JP 9532025 A 19950221

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8228337 A 16 H04N-007/18

JP 3191596 B2 15 H04N-007/18 Previous Publ. patent JP 8228337

#### Abstract (Basic): JP 8228337 A

The method involves using a first camera (5) which picks up image of a passing vehicles. A second camera (6) picks up image of the vehicle including the driver's seat. The outputs of the two cameras are fed to an image processing part (7). The image taken by the first camera is temporarily stored in a primary memory (2).

When an abnormal vehicle is detected, the image stored in the primary memory is transferred to a secondary memory (3). A mass image memory (4) stores the images taken by the camera only after the storage capacity of the secondary memory is extinguished completely.

ADVANTAGE - Picks up images of vehicle even moving at high speed. Saves memory space considerably. Reduces operation time of image record part.

Dwq.1/12

Title Terms: IMAGE; DATA; STORAGE; METHOD; AUTOMATIC; FEE; PLACE; HIGHWAY; STORAGE; IMAGE; MASS; IMAGE; MEMORY; AFTER; SECONDARY; MEMORY; FILLED ; IMAGE; COMPLETE

Index Terms/Additional Words: VTR

Derwent Class: S02; T01; T07; W02; W04

International Patent Class (Main): H04N-007/18

International Patent Class (Additional): G01B-011/24; G06T-001/00;

G06T-001/60; G08G-001/04; H04N-005/907

File Segment: EPI

# (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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010173582 \*\*Image available\*\* WPI Acc No: 1995-074835/199510

XRPX Acc No: N95-059337

Memory card with two SRAM arrays with different data holding up voltages and power back- up - has second volatile memory device for storing attribute data which includes volatile memory backed- up by prim cell and full CMOS type memory element

Patent Assignee: MITSUBISHI DENKI KK (MITQ

Inventor: SANEMITSU Y

Number of Countries: 001 Number of Patents: 001

Patent Family:

Kind Date Patent No Applicat No Kind Date US 5384748 19950124 US 93130876 Α Α 19931004 199510 B

Priority Applications (No Type Date): JP 92268953 A 19921007

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5384748 A 8 G11C-011/412

# Abstract (Basic): US 5384748 A

The memory card includes a first volatile memory device for storing data and having min data holding voltage, a second volatile memory is for storing at least attribute data concerning attributes of the memory card. The second volatile memory cells have a min data holding voltage lower than that of the first volatile memory device.

The memory card also incorporates a signal transmission device for transmitting data, address and control signals between the first and second volatile memory devices and an external device. The control device is connected to the signal transmission device for selectively setting the first and second volatile memory devices in operable state in response to a signal from the external device.

USE/ADVANTAGE - Instatic random access memory car which stores attribute data associated with itself. Shorter writing time of memory element for storing attribute data and reduced production cost. Dwq.3/6

Title Terms: MEMORY; CARD; TWO; SRAM; ARRAY; DATA; HOLD; UP; VOLTAGE; POWER; BACK; UP; SECOND; VOLATILE; MEMORY; DEVICE; STORAGE; ATTRIBUTE; DATA; VOLATILE; MEMORY; BACK; UP; PRIMARY; CELL; FULL; CMOS; TYPE; MEMORY; ELEMENT

Derwent Class: T01; U14

International Patent Class (Main): G11C-011/412

International Patent Class (Additional): G11C-011/417

File Segment: EPI

# 5/5/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007786968

WPI Acc No: 1989-052080/198907

Series parallel charge coupled semiconductor memory - is used in video equipment to store digitised picture data using clocked electrodes

Patent Assignee: PHILIPS GLOEILAMPENFAB NV (PHIG ) Number of Countries: 013 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
NL 8701110	Α	19881201	NL 871110	A	19870511	198907	В
EP 291118	Α	19881117	EP 88200875	Α	19880504	198907	
AU 8815841	· A	19881117				198911	
JP 1033968	Α	19890203	JP 88112708	Α	19880511	198911	
CN 8802808	A	19881130				198946	
US 4878202	Α	19891031	US 88187612	Α	19880428	199002	

Priority Applications (No Type Date): NL 871110 A 19870511

Cited Patents: No-SR.Pub

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

NL 8701110 A 17

EP 291118 A E

Designated States (Regional): AT CH DE FR GB IT LI NL SE

US 4878202 A 9

# Abstract (Basic): NL 8701110 A

A series signal source is connected to a series input register. Across the register are an input gate and clocked electrodes. The clocked electrodes are alternate storage electrodes and transfer electrodes. The register contents are transferred down the parallel section of the memory, via a transfer gate, each time a circuit indicates when the input register is full.

At the bottom of the parallel section is the series output register which feeds the signals out via an output amplifier.

USE/ADVANTAGE - Stores one or more interlaced lines of digitised video signal data. Compact and inexpensive.

0/7

Title Terms: SERIES; PARALLEL; CHARGE; COUPLE; SEMICONDUCTOR; MEMORY; VIDEO ; EQUIPMENT; STORAGE; DIGITAL; PICTURE; DATA; CLOCK; ELECTRODE

Derwent Class: U13; U14; W04

International Patent Class (Additional): G11C-019/28; G11C-027/00;

H01L-027/10; H01L-029/76; H04N-005/90

File Segment: EPI

# 5/5/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004025594

WPI Acc No: 1984-171136/198427

·XRPX Acc No: N84-127555 Memory back-up system for fault-tolerant computer - stores all data modified under program control, temporary in non-write-through cache

associated with the control processor

Patent Assignee: SEQUOIA SYSTEMS INC (SEQU-N) Inventor: BUDWEY M J; NOLAN J M; STIFFLER J J Number of Countries: 013 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 8402409	Α	19840621	WO 83US1970	A	19831209	198427	В
AU 8322262	Α	19840614				198431	
EP 128945	Α	19841227	EP 83900358	Α	19831209	198501	
CA 1210157	Α	19860819				198638	
US 4654819	Α	19870331	US 85750652	Α	19850628	198715	
US 4819154	Α	19890404	US 86937978	Α	19861204	198916	
EP 128945	В	19910130				199105	
DE 3382152	G	19910307				199111	

Priority Applications (No Type Date): US 82448419 A 19821209; US 85750652 A 19850628

Cited Patents: FR 2346772; GB 1369059; US 3760364; US 4020466; US 4044337; US 4159517; US 4164017; 2.Jnl.Ref; GB 1639059

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8402409 A E 100

Designated States (Regional): AT BE CH DE FR GB LU NL SE

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Designated States (Regional): AT BE CH DE FR GB LI LU NL SE

Abstract (Basic): EP 128945 A

A memory backup apparatus for a fault-tolerant multi-tasking computer system having a processing element which generates task control signals for controlling the system during a context switch; a first memory area and a second, physically separate memory area for storing duplicate copies of data and subequent computational results generated by the processing element; a temporary

storage area(250) associated with the processing element, the storage area generating a full signal when a predetermined number of locations in the storage area have been written to; a memory control circuit (245) for controlling transfers between the temporary stora-ge area, the first memory area and the second memory area; and a

fault signal, characterized in that the memory control circuit (245) is such as to write selected portions of the temporary storage area comprising computational results into the memory area in response to the full signal or the task control signals and tow write the same selected portions of the temporary storage area into the second memory area after the writing of data from the temporary storage area into the first memory area has been completed and no fault condition has been detected, and, in case of a fault condition using the last portions of the first or second memory area non affected by the fault condition as restart information. (46pp)

Title Terms: MEMORY; BACK; UP; SYSTEM; FAULT; TOLERATE; COMPUTER; STORAGE; DATA; MODIFIED; PROGRAM; CONTROL; TEMPORARY; NON; WRITING; THROUGH; CACHE ; ASSOCIATE; CONTROL; PROCESSOR

Derwent Class: T01

International Patent Class (Additional): G06F-011/14; G06F-013/00;

G06Z-011/16

File Segment: EPI

#### 5/5/8 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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003241859

WPI Acc No: 1982-A2739E/198202

# Real-time error correct for multitrack magnetic memory processes data in parallel on more than the channel using either full or abbreviated fire code

Patent Assignee: THOMSON CSF (CSFC )

Inventor: DECOUASNON T

Number of Countries: 005 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date Week EP 42776 A 19811230 198202 B FR 2485237 Α 19811224 198205 US 4486881 Α 19841204 US 81274382 19810617 198451

Priority Applications (No Type Date): FR 8013597 A 19800619

Cited Patents: 6.Jnl.Ref; US 3439331; US 4052698

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 42776 A F 20

Designated States (Regional): DE GB NL

Abstract (Basic): EP 42776 A

Two levels of correction are established from **redundancy** bits added to the transmitted **data**. One mode of correction of short errors (1 to 7 per packet) uses bits introduced by the data processor before recording by an abbreviated Fire code, series bits being grouped in blocks of 180 to which 20 dependent redundancy bits are appended.

The other mode of correction of long errors (8 to 512 per packet) uses parity bits, recorded on at least one reserved track, resulting from coding of parallel bits to be **recorded** at the same **time**. An assembly of decoders provides data corrected from the Fire code bits which are substituted as required for the data stored in a memory. When the errors in a block in one channel are too long for such correction, two parity calculators in association with multiplexers allow the erroneous bits to be corrected.

Title Terms: REAL-TIME; ERROR; CORRECT; MULTITRACK; MAGNETIC; MEMORY; PROCESS; DATA; PARALLEL; MORE; ONE; CHANNEL; FULL; ABBREVIATE; FIRE; CODE

Derwent Class: T01; T03; W01

International Patent Class (Additional): G06F-011/10; G11B-005/09

File Segment: EPI

# 5/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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001332267

WPI Acc No: 1975-M6197W/197547

# Resource balancing system - designed for multi-programming systems with virtual memory and paging allocation

Patent Assignee: IBM CORP (IBMC )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 940017 H 19751104 197547 B

Priority Applications (No Type Date): US 74450622 A 19740313

Abstract (Basic): US 940017 H

A virtual memory system includes a main memory which accommodates several jobs on a time shared basis. When a job requires data not in the main memory, secondary memory is accessed by means of a signal known as a page fault. A list (stack) of page faults and their real time is recorded. At the time of each fault, the elapsed time for a full stack of faults is calculated and tested to find whether it exceeds a maximum. If so, a new job is then added to the jobs being performed by the system. If the elapsed time is less than a minimum, then the job with the earliest promotion time is demoted from the jobs being performed.

Title Terms: RESOURCE; BALANCE; SYSTEM; DESIGN; MULTI; PROGRAM; SYSTEM;

VIRTUAL; MEMORY; PAGE; LOCATE

Derwent Class: T01

International Patent Class (Additional): G06F-009/18

File Segment: EPI

5/5/10 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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06800681 \*\*Image available\*\*

RECORDING TIME EXTENDING METHOD FOR RECORDING MEDIUM

PUB. NO.: 2001-028164 [JP 2001028164 A] PUBLISHED: January 30, 2001 (20010130)

INVENTOR(s): SHIMIZU KYOICHI

APPLICANT(s): VICTOR CO OF JAPAN LTD APPL. NO.: 11-199174 [JP 99199174] FILED: July 13, 1999 (19990713)

INTL CLASS: G11B-020/10; G06F-012/02; H04N-005/915

#### ABSTRACT

PROBLEM TO BE SOLVED: To extend **recording time** by thinning stored **recording** information at equal intervals and recording new information in an opened partial recording area.

SOLUTION: Analog audio signals inputted to an input terminal IN are sampled, digitized by an A/D converter (A/D) 2 and stored in a shift register (SRI) 4 for input as a data stream (a). When this data stream becomes a prescribed quantity, it is stored through a parallel port (PP) 8P into the prescribed address of a memory (MEM) 8 under the control of an address controller (ADRS-CNT) 8A and it is repeated until that address is filled. After the address is filled, when signals are further inputted, concerning these signals, the data stream (a) to be overwritten on the SRI 4 is read out of the MEM 8 and a new thinned data stream is reentered to the SRI 4 under the control of the ADRS-CNT 6. A signal stream (b) in the A/D 2 is thinned by reducing band areas by half in comparison with initial one and overwritten so as to be alternately mixed with the data (a).

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5/5/11 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

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06233740 \*\*Image available\*\*

FLASH MEMORY SYSTEM

PUB. NO.: 11-175311 [JP 11175311 A]

PUBLISHED: July 02, 1999 (19990702)

INVENTOR(s): KAKINUMA YUJI

APPLICANT(s): TDK CORP

APPL. NO.: 09-352165 [JP 97352165] FILED: December 05, 1997 (19971205) INTL CLASS: G06F-005/06; G06F-013/38

#### **ABSTRACT**

PROBLEM TO BE SOLVED: To provide a flash memory system capable of an operation at a high speed with less delay of **write** /read **time**.

SOLUTION: This system is provided with a bus interface 2 connected to a host computer 1, a flash memory interface for performing write/read to a flash memory 5 and a data relay means 3 for relaying data sent out from the side of the host computer 1 to the side of the flash memory 5 and the data sent out from the side of the flash memory 5 to the side of the host computer 1 and adjusting the data transfer speed of the host computer 1 and the flash memory 5. The data relay means 3 is provided with two buffers A

and B for temporarily storing the data of a pre-ribed length, alternately stores the ta sent out from the side of the host computer 1 or the side of the flash memory 5 in the two buffers A and B and alternately sends out the data from the buffer filled with the data to the side of the flash memory 5 or the side of the host computer 1.

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5/5/12 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

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\*\*Image available\*\* 04070115

SIMULATION PROCESSOR FOR RECORDING/REPRODUCTION

PUB. NO.: 05-061815 [JP 5061815 A] PUBLISHED: March 12, 1993 (19930312)

INVENTOR(s): NOGAMI TSUGIO

FUJIYAMA KENJI SERIKAWA KAZUNORI

APPLICANT(s): NIPPON STEEL CORP [000665] (A Japanese Company or

Corporation), JP (Japan)

TAIHEI KOGYO CO LTD [401864] (A Japanese Company or

Corporation), JP (Japan) 03-253062 [JP 91253062] APPL. NO.:

FILED: September 04, 1991 (19910904) INTL CLASS: [5] G06F-013/36; G06F-015/74

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4

(INFORMATION PROCESSING -- Computer Applications)

JOURNAL: Section: P, Section No. 1574, Vol. 17, No. 381, Pq. 147, July

16, 1993 (19930716)

## ABSTRACT

PURPOSE: To execute the simultaneous processing of recording/reproduction on multiple pieces of data through the use of a recording medium having seek time restriction.

CONSTITUTION: Multiple pieces of input data are sequentially sampled by a multiplexer 3 at 10m sec, and they are alternately written into memories 2a and 2b at every 10m sec. Written data are alternately written into memories 4a and 4b having the storage capacity of 1000m sec till they are filled . Then, they are transferred to a hard disk 6 so as to record/reproduce high speed. Thus, recording from one memory into the hard disk terminates, and a reproduction processing can be executed till recording from the other memory is started. Thus, input data can be fetched on a real time basis while recording is executed by using a multi-bus for a data transfer means from the memory to the memory.

#### 5/5/13 (Item 4 from file: 347)

DIALOG(R) File 347: JAPIO

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03840802 \*\*Image available\*\*

DIGITAL DATA RECORDER

PUB. NO.: 04-205902 [JP 4205902 A] PUBLISHED: July 28, 1992 (19920728)

INVENTOR(s): MUKAI MAMORU

APPLICANT(s): ASAMA EREKURAFUTO KK [000000] (A Japanese Company or

Corporation), JP (Japan)

TAKAMISAWA CYBERNETICS CO LTD [358835] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 02-330669 [JP 90330669] November 30, 1990 (19901130)

INTL CLASS: [5] G11B-005/02; G11B-015/02; G11B-015/087; G11B-025/10

JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)

. JAPIO KEYWORD: R101 (APPL) ELECTRONICS -- Video Tape Recovers, VTR); R131 (INFORMATION PROCESSING -- Microcomputers & Arcroprocessers)

JOURNAL:

Section: P, Section No. 1453, Vol. 16, No. 551, Pg. 24,

November 20, 1992 (19921120)

# ABSTRACT

PURPOSE: To perform analysis with one of memory cards taken out when a measuring data required for analysis is generated by providing a magnetic tape recording device as a long time recording device for recording for a long time and, on the other hand, two exchangeable sets of memory card devices for alternate recording for a short time.

CONSTITUTION: The subject device is provided with the long time recording device 3 for performing a long time recording and the two sets of the short time recording devices 4 and 4' capable of performing a short time recording alternately and exchanging one for the other. Then, a measuring data of, for instance, a sampled seismic wave, etc., is stored in a memory card inserted into the memory card device 4, and when this memory card is filled up, the storing of the measuring data is stopped, and alternately the memory card inserted into the memory card device 4' is started to be stored with the measuring data. Afterward, the data of its filled memory card is transferred to a digital audio tape(DAT) recording device 3 to be recorded on a magnetic tape. By this method, when an emergency arises, either of the memory cards is taken out to perform its analysis.

5/5/14 (Item 5 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2001 JPO & JAPIO. All rts. reserv.

03805663 \*\*Image available\*\*

DIGITAL DATA RECORDING/REPRODUCING DEVICE

PUB. NO.: 04-170763 [JP 4170763 A] PUBLISHED: June 18, 1992 (19920618)

INVENTOR(s): OKABE MASAO

APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company

or Corporation), JP (Japan)

APPL. NO.: 02-295269 [JP 90295269] FILED: November 02, 1990 (19901102) INTL CLASS: [5] G11B-020/10; G06F-003/06

JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment); 45.3 (INFORMATION PROCESSING

-- Input Output Units)

JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers &

Microprocessers)

JOURNAL: Section: P, Section No. 1431, Vol. 16, No. 481, Pg. 72,

October 06, 1992 (19921006)

# ABSTRACT

PURPOSE: To enable reproduction to be in disabled state and security of data to be retained positively by disabling correction when performing error correction as far as no proper keyword data is set at the time of reproduction.

CONSTITUTION: Data conversion is performed to an entire coded data where error correction coding processing is performed and redundancy data is added and it is recorded on a tape. At the time of reproduction, a coded data which should have been recorded is restored by performing inverse conversion with the same keyword as a conversion keyword which is used at the time of recording. When a keyword data which is different from the keyword data which is set at the time of reproduction, original coded data cannot be retrieved when performing inverse conversion of data and it becomes quite meaningless data as an error correction symbol so that a situation, where errors occur in nearly all data, occurs when correcting errors, a read processing exceeding the limit of correction capacity is performed, no proper reproduction is made regardless of reading, and error messages are returned to an external

(Item 6 from file: 347) 5/5/15

DIALOG(R) File 347: JAPIO

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02958326 \*\*Image available\*\* TIME SERIES DATA BASE SYSTEM

PUB. NO.:

01-255926 [JP 1255926 A] October 12, 1989 (19891012)

PUBLISHED:

NAOE HIDENORI

INVENTOR(s):

SASAKI TOSHIRO MATSUMOTO KUNIAKI

KOSAKA MITSUTAKA

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP

APPL. NO.:

63-082926 [JP 8882926]

FILED: INTL CLASS: April 06, 1988 (19880406)

[4] G06F-007/28; G06F-012/00; G06F-012/00

JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units);

45.2 (INFORMATION PROCESSING -- Memory Units)

JOURNAL:

Section: P, Section No. 986, Vol. 14, No. 4, Pg. 78, January

09, 1990 (19900109)

#### **ABSTRACT**

PURPOSE: To efficiently control a time series data base by storing the data of the time series with the time and attribute as a parameter, to a secondary memory.

CONSTITUTION: In a secondary memory 1, time series data are stored into the part specified by as time (t) and an attribute C. When the time and attribute of an input output device 2 are designated, the control part B write the designated time series data in a part A of the input output device 2. Plural relational data bases are supplied to the time series data and with the data base, the inquiry can be executed for the data written in the part A. When the inside of the secondary memory 1 is filled , the oldest data are eliminated, and the storing area of the time series data transmitted newly is formed.

#### 5/5/16 (Item 7 from file: 347)

DIALOG(R) File 347: JAPIO

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02580165 \*\*Image available\*\*

IMAGE FILING DEVICE

PUB. NO.: PUBLISHED:

63-197065 [JP 63197065 A] August 15, 1988 (19880815)

INVENTOR(s): SAGO MASAKI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.:

62-029047 [JP 8729047]

FILED:

February 10, 1987 (19870210)

INTL CLASS:

[4] G11B-020/10; H04N-001/21; G06F-015/62

JAPIO CLASS:

42.5 (ELECTRONICS -- Equipment); 44.7 (COMMUNICATION --Facsimile); 45.4 (INFORMATION PROCESSING -- Computer

Applications)

JAPIO KEYWORD: R090 (PRECISION MACHINES -- Microforms); R102 (APPLIED

ELECTRONICS -- Video Disk Recorders, VDR); R131 (INFORMATION

PROCESSING -- Microcomputers & Microprocessers); R138 (APPLIED ELECTRONICS -- Vertical Magnetic & Photomagnetic

Recording)

JOURNAL:

Section: P, Section No. 801, Vol. 12, No. 480, Pg. 145,

December 15, 1988 (19881215) ABSTRACT

PURPOSE: To make the regimering of the present time successful even if the registering is delived by executing the interrupt g/restarting of image input according to the speed of storing images in case of inputting an image from an image input means and storing the input image in an image storage means through an image temporary storage means.

CONSTITUTION: When a scanner 16 begins to read the image, a scanner printer interface (SP-I/F) 14 alternately stores image data transferred from the scanner 16 in memories for image 40 and 41. When either image memory 40 or 41 is full of the data, the SP-I/F 14 informs it to a microprocessing unit (MPU) 6 by means of interruption. When the SP-I/F 14 receives the instruction of interrupting a read and the indication of restarting a read from the MPU 6 in the midst of reading the image, the SP-I/F 14 transmits them to the scanner 16 so as to execute the interrupting and restarting the read. Even if there is not a memory equivalent to one page of images, the registering of the read of image can be executed without any delay, so that the up of working efficiency and the lowering of cost can be enhanced.

5/5/17 (Item 8 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2001 JPO & JAPIO. All rts. reserv.

01578961 \*\*Image available\*\*
SORTING PROCESSOR

PUB. NO.: 60-057461 [JP 60057461 A] PUBLISHED: April 03, 1985 (19850403)

INVENTOR(s): KAWADA TADAMICHI

TAKAHASHI YUKIO YAMANE MICHIHIRO

APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese

Company or Corporation), JP (Japan)

APPL. NO.: 58-165267 [JP 83165267] FILED: September 09, 1983 (19830909)

INTL CLASS: [4] G06F-015/16

JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

JOURNAL: Section: P, Section No. 378, Vol. 09, No. 190, Pg. 9, August

07, 1985 (19850807)

# ABSTRACT

PURPOSE: To attain the high-speed sorting despite different numbers of data be sorted and held by each element by providing plural detecting means and storing or ring-shifting them **alternately** to an idle **data** register.

CONSTITUTION: Sorting control circuits 51, 52 and 5n compare data within data within data registers RA and RB to rearrange them and also store the data within memories 21, 22 and 2n to idle registers RA and RB. At the same time, the data within registers RA and RB are ring-shifted repetitively and synchronously with all processing units 11, 12 and 1n. When the data to be sorted are stored to registers RA and RB or these registers are filled, a signal line 1150 is set at ''1'' via detecting means 900 and 1000. Thus the actions are stopped to store the data to be sorted to registers RA and RB, and parallel sorting actions are started. This ensures the effective use of both registers RA and RB. Thus the sorting time is decreased and the high-speed processing is possible.

File 348:EUROPEAN PATENTS 978-2001/Oct W01

(c) 2001 European Patent Office
File 349:PCT Fulltext 1983-2001/UB=20011011,UT=20011004

(c) 2001 WIPO/Univentio

Set	Items Description
S1	17437 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM-
	ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR -
	FILES OR RAID? ? OR DISK(2N)ARRAY?)
S2	64792 TIMESTAMP? OR (TIME(NOT 2N) REAL OR DAY OR DATE OR HOUR? OR
	MINUTE?)(2N)(STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? -
	OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
S3	432777 (REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM) OR -
	FILL??? OR FULL OR USED()UP
S4	110 S1(S)S2(S)S3
S5	5620 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR SECONDAR-
	Y) (5N) (SERVER? OR STORAGE OR RAID? ? OR DISK(2N) ARRAY?)
S6	42 S5(S)S2(S)S3
S7	71587 (REACH? OR LIMIT? OR ACHIEV? OR FULL OR FILL??? OR (USED OR
	USING)()UP)(5N)(CAPACITY OR MAXIM?)
S8	109340 (SPACE? ? OR AREA? ?)(3N)(FULL OR USED OR FILLED) OR S7
S9	28 S8(S)S5(S)S2
S10	25 S9 NOT (PIPELINE? OR PROTEIN? ? OR POLYPEPTIDE?)/TI

```
10/3,K/1 (Item 1 from file: 348)
DIALOG(R) File 348: EUROPEA PATENTS
(c) 2001 European Patent Office. All rts. reserv.
00996862
Start code detecting apparatus for video data stream
Vorrichtung zur Startkodedetektierung fur Videodatenstrom
Appareil de detection de code de depart pour un flux de donnees video
PATENT ASSIGNEE:
  Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA
    92614, (US), (Applicant designated States: all)
  Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA,
    (GB)
  Sotheran, Martin William, The Ridings, WickLane Stinchcombe, Dursley,
    Gloucestershire G11 6BD, (GB)
  Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE,
  Finch, Helen Rosemary, Tyley, Coombe, Wotton-under-edge, Gloucester GL12
    7ND, (GB)
  Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB)
LEGAL REPRESENTATIVE:
  Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
    rue Louis Chirpaz, 69131 Ecully Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 901287 A2
                                              990310 (Basic)
                               EP 901287 A3
APPLICATION (CC, No, Date):
                               EP 98202166 950228;
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED PARENT NUMBER(S) - PN (AN):
  EP 674443 (EP 95301301)
INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38
ABSTRACT WORD COUNT: 112
NOTE:
  Figure number on first page: 61
FULLTEXT AVAILABILITY:
Available Text Language
                            Update
                                      Word Count
      CLAIMS A (English)
                            9910
                                        191
      SPEC A
                (English)
                            9910
                                     126718
Total word count - document A
                                     126909
```

LANGUAGE (Publication, Procedural, Application): English; English; English

Total word count - document B Total word count - documents A + B 126909

... SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary storage , and the stages in the pipeline are and **secondary** reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...coded data. MPEG can use both these techniques.

In accordance with the present invention, MPEG/JPEG blocks of user and extension data preceded by start/marker codes can be detected by the Start Code Detector. H.261/MPEG "extra information" is detected by the Huffman decoder of the present invention. See...has two sets of registers that define two similar buffers. The buffer limit register

(buffer(underscore)limit) defines the physical upper limit of the memory space . All addresses are calculated modulo this number.

Within the limits of the available memory, the extent of each buffer is defined by two registers: the...

10/3, K/2(Item 2 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2001 European Patent Office. All rts. reserv.

# Multistandard decoder for affman codes Mehrnormendekodierer fur huffmancodes Decodeur multistandard de codes de Huffman

PATENT ASSIGNEE:

Discovision Associates, (260275), 2355 Main Street, Suite 200, Irvine, CA 92614, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IE; IT; LI; NL)

# INVENTOR:

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchhay, Bristol BS16 1NA, (GB)

Sotheran, Martin William, The Riddin gs, Wick Lane Stinchcombe, Dursley, GLoucestershire GL11 6BD, (GB)

Robbins, William Philip, 19 Sprin ghill, Cam, Gloucestershire GL11 5PE, (GB)

Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester GL12 7ND, (GB)

Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB) LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20, rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 901286 A1 990310 (Basic)

APPLICATION (CC, No, Date): EP 98202135 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

RELATED PARENT NUMBER(S) - PN (AN):

EP 674443 (EP 953013018)

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38; ABSTRACT WORD COUNT: 155

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) 9910 390 SPEC A (English) 9910 126718

Total word count - document A 127108

Total word count - document B 0

Total word count - documents A + B 127108

... SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary and **secondary storage**, and the stages in the pipeline are reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...coded data. MPEG can use both these techniques.

In accordance with the present invention, MPEG/JPEG blocks of user and extension data preceded by start/marker codes can be detected by the Start Code Detector. H.261/MPEG "extra information" is detected by the Huffman decoder of the present invention. See...has two sets of registers that define two similar buffers. The buffer limit register (buffer (underscore) limit) defines the physical upper limit of the memory.

(buffer(underscore)limit) defines the physical upper limit of the memory space . All addresses are calculated modulo this number.

Within the limits of the available memory, the extent of each buffer is defined by two registers: the...

# 10/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00939568

# DISK ARRAY SUBSYSTEM

ANORDNUNGSUNTERSYSTEM FUR SPEICHERPLATTEN

SOUS-SYSTEME A PILES DE DISQUES

PATENT ASSIGNEE:

Hitachi, Ltd., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo
101, (JP), (Applicant designated States: all)
INVENTOR:

KOMACHIYA, Tsunetaka, achi Shinwaryo A-305, 6-1 , Shinbori, Odawara-shi, Kanagawa 250, (JP)

KAMO, Yoshihisa, 2-38-22, Shinmei, Musashimurayama-shi, Tokyo 208, (JP) YAMAMOTO, Akira, 6-5-61, Wakamatsu, Sagamihara-shi, Kanagawa 229, (JP) LEGAL REPRESENTATIVE:

Strehl Schubel-Hopf & Partner (100941), Maximilianstrasse 54, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 986000 A1 000315 (Basic)

WO 9812621 980326

APPLICATION (CC, No, Date): EP 96931271 960920; WO 96JP2718 960920

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-003/06

ABSTRACT WORD COUNT: 125

NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200011 1286
SPEC A (English) 200011 3967
Total word count - document A 5253
Total word count - document B 0
Total word count - documents A + B 5253

- ...SPECIFICATION data in the parity data area B109 have been duplexed. Fig. 6 shows data arrangement in the disk array subsystem after the change. The conventional disk array subsystem required, when changing the redundancy method from parity to mirror, that the DKC 102 further copy the data blocks into the mirror data area of another drive after the second...
- ...can dispense with the step of copying the data blocks from one mirror data area to another since the data blocks in the parity data area themselves are used as one group of the duplexed data. The conventional disk array subsystem required that five drives be exclusively used and that three times of reading...
- ...blocks 9, 10 and 11 from parity to mirror by requiring that four drives be used and that three times of reading and a single time of writing be made as shown in Fig. 5. As a result, the subsystem according to the present invention can reduce the utilization rate of its drives and...

# 10/3,K/4 (Item 4 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

# 00711606

Start code detector for image sequences Detektor fur den Startcode von Bildsequenzen Detecteur de code de depart pour sequences d'images PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)
INVENTOR:

Wise, Adrian Philip, 10 Westbourne Cottages, Frenchay, Bristol BS16 1NA, (GB)

Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley, Gloucestershire GL11 6BD, (GB)

Robbins, William Philip, 19 Springhill, Cam, Gloucestershire GL11 5PE, (GB)

Finch, Helen Rosemary, Tyley, Coombe, Wotton-Under-Edge, Gloucester. GL12 7ND, (GB)

Boyd, Kevin James, 21 Lancashire Road, Bristol BS7 9DL, (GB) LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20,
 rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

```
EP 674443 A2
PATENT (CC, No, Kind, Da
                                             950927 (Basi
                              EP 674443 A3
                                             951213
                              EP 674443 A3
                                             981223
                              EP 674443 B1
                                             010509
                              EP 95301301 950228;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): GB 9405914 940324
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL
RELATED DIVISIONAL NUMBER(S) - PN (AN):
  EP 891089
            (EP 98202149)
     (EP 98202154)
  EP 884910
            (EP 98202132)
  EP 891088 (EP 98202133)
  EP 897244 (EP 98202134)
  EP 901286 (EP 98202135)
  EP 901287 (EP 98202166)
  EP 896473 (EP 98202170)
  EP 896474
            (EP 98202171)
  EP 896476 (EP 98202174)
  EP 896475 (EP 98202172)
INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38
ABSTRACT WORD COUNT: 102
NOTE:
  Figure number on first page: 61
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
     CLAIMS A (English) EPAB95
                                      2897
      CLAIMS B
               (English)
                          200119
                                       647
     CLAIMS B
                (German)
                          200119
                                       609
      CLAIMS B
                 (French)
                          200119
                                       752
      SPEC A
                (English)
                          EPAB95
                                    128616
     SPEC B
                (English) 200119
                                    122384
Total word count - document A
                                    131543
Total word count - document B
                                    124392
Total word count - documents A + B 255935
... SPECIFICATION stages in the pipeline are afforded enhanced flexibility
  in configuration and processing.
    Each of the processing stages in the pipeline may include both primary
                  storage, and the stages in the pipeline are
  reconfigurable in response to recognition of selected tokens. The tokens
  in the pipeline are dynamically adaptive and may...the maximum permitted
  by JPEG). However, additional user intervention is required if more than
  4 color component are to be decoded. JPEG only allows a maximum of 4
  components in any scan.
```

A.14.4.8 Non-standard variants

As stated above, the Spatial Decoder supports some picture formats beyond those...quantization tables are loaded. This should be done while iq(underscore)access is set to 1. The values in Table A.15.2 should be written into locations 0x00 to 0x3F of the inverse quantizer's extended address space (accessible through the keyhole registers iq(underscore)keyhole(underscore)address and iq...

```
10/3,K/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2001 European Patent Office. All rts. reserv.
```

### 00711605

Reconfigurable data processing stage Rekonfigurierbare Datenverarbeitungsstufe Etage d'operation de donnees reconfigurable PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all) INVENTOR:

Wise, Adrian Philip, 1 estbourne Cottages, Frenchay, Stol, BS16 1NA, (GB)

Sotheran, Martin William, The Ridings, Wick Lane, Stinchcombe, Dursley, Gloucestershire, GL11 6BD, (GB)

Robbins, William Philip, 19 Springhill, Cam, Gloucestershire, GL11 5PE, (GB)

LEGAL REPRESENTATIVE:

Vuillermoz, Bruno et al (72791), Cabinet Laurent & Charras B.P. 32 20, rue Louis Chirpaz, 69131 Ecully Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 674446 A2 950927 (Basic)

EP 674446 A3 960814

EP 674446 B1 010801

APPLICATION (CC, No, Date): EP 95301300 950228;

PRIORITY (CC, No, Date): GB 9405914 940324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IE; IT; LI; NL

INTERNATIONAL PATENT CLASS: H04N-007/24; G06F-013/00; G06F-009/38

ABSTRACT WORD COUNT: 144

NOTE:

Figure number on first page: 10

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

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Available Text Language
                          Update
                                   Word Count
     CLAIMS A (English) EPAB95
                                    2475
     CLAIMS B (English) 200131
                                    1079
     CLAIMS B
               (German) 200131
                                    1072
     CLAIMS B
               (French) 200131
                                    1186
                                  125236
     SPEC A
               (English) EPAB95
     SPEC B
               (English) 200131
Total word count - document A
Total word count - document B
Total word count - documents A + B 252410
```

... SPECIFICATION stages in the pipeline are afforded enhanced flexibility in configuration and processing.

Each of the processing stages in the pipeline may include both primary and secondary storage, and the stages in the pipeline are reconfigurable in response to recognition of selected tokens. The tokens in the pipeline are dynamically adaptive and may...valid DATA Token, however, the signal QI2 will be a "0", and the signal S3 and the output QO3, will be forced HIGH until the DATE ...DATA is loaded into LDOUT, OUTEXTN will be "1", and during the second time, OUTEXTN will be "0", indicating the true end of the token.

The output signal QVIN from the validation latch LVIN is combined with the signal...able to perform the necessary operations for each of the standards, and the control, as to which operations are to be performed at a given time, come as tokens. There is one processing element that differs between the different stages to provide this capability. In the state machine ROM of the...Again, a swing buffer which is partially full of data will not empty until it is totally filled and/or it knows that it is time to empty. The PICTURE...access register. Writing 1 to this register allows the interface timing registers (in Table A.5.2) to be modified. While interface...

...SPECIFICATION likely as levels of integration progress so that the number of chips in a system drops) there will still be the considerable advantage of better time -to-market than can be achieved, since the same design can be reused.

In particular, note the situation that occurs when it becomes necessary to extend the...valid DATA Token, however, the signal QI2 will be a "C", and the signal S3 and the output QO3, will be forced HIGH until the DATE (underscore) TOKEN signal once again goes to a "1".

The output QO3 (the NOT(underscore) DUPLICATE signal) is also fed back and is combined with...of multi-standard adaptability, there are a number of different tables and the circuitry selects the appropriate table for the appropriate standard at the appropriate time. Each standard has multiple tables; the circuitry selects from the set at any given time. Within any one standard, the circuitry selects one table at...under the

control of the write a ess 313 and control 314. From [31] 311 and 8 312, the data is written into DRAM 515. When writing data into DRAM 1 311 and RAM2 315, the DRAM row address is provided by the address generator, and the column address is provided by the write address and...interval should be configured only once after each reset.

While reset is asserted, the DRAM interface is unable to refresh the DRAM. However, the reset time required by the decoder chips is sufficiently short, so that it should be possible to reset them and then to re-configure the DRAM interface...and then 0x04 into coded(underscore)data (7:0). The start of this new DATA Token then passes into the Spatial Decoder for processing.

Each time a new 8 bit value is written to coded(underscore)data (7:0), the current Token is extended. Coded (underscore) extn need only be accessed...

...is indicated by writing 0 to coded(underscore)extn followed by writing the last word of the current Token into coded data (7:0). Each time before writing to coded (underscore) data (7:0), coded(underscore)busy should be inspected to see if the interface is

A.10...first stage in parsing the coded data. The Start Code Detector is the first block on the Spatial Decoder following the input circuit.

The start/marker code patterns are designed so that they can be identified without decoding the entire bitstream. Thus, they can be used in accordance with the present...16.1 Structure of JPEG pictures

This section provides an overview of some features of the JPEG syntax. Please refer to the coding standard for full details.

JPEG provides a variety of mechanisms for encoding individual pictures. JPEG makes no attempt to describe how a collection of pictures could be encoded...

#### 10/3, K/6(Item 6 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS

ready to accept more data.

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# 00466920

Improvements in or relating to integrated circuits. Verbesserungen in oder in Beziehung zu integrierten Schaltungen. Ameliorations dans ou relatif a des circuits integres. PATENT ASSIGNEE:

TEXAS INSTRUMENTS INCORPORATED, (279070), 13500 North Central Expressway, Dallas Texas 75265, (US), (applicant designated states: DE;FR;GB;IT;NL)

McAdams, Hugh P., 17158 South Ivy Cr., Houston, Texas 77084, (US) Loh, Wah K., 2113 Prairie Creek Drive, Richardson, Texas 75080, (US) LEGAL REPRESENTATIVE:

Leiser, Gottfried, Dipl.-Ing. et al (7511), Patentanwalte Prinz, Leiser, Bunke & Partner Manzingerweg 7, W-8000 Munchen 60, (DE)

PATENT (CC, No, Kind, Date): EP 476282 A2 920325 (Basic) EP 476282 A3

EP 91112866 910731; APPLICATION (CC, No, Date):

PRIORITY (CC, No, Date): US 560961 900731

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G11C-005/14;

ABSTRACT WORD COUNT: 224

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update CLAIMS A (English) EPABF1 Update Word Count (English) EPABF1 t - document A t - document B 471 SPEC A 97767 Total word count - document A 98238 Total word count - document B 0

Total word count - documents A + B 98238

...SPECIFICATION CODE2. Schematic 14.0, the Row Redundancy Address circuit, is used 120 times in the chip. Tables RRA ... of P-channel transistor 52:MP7.

Appendix 19 contains — code for Global Amplifier Selected Circuit, GASEL Shown on FIG. 52.

FIG. 53 illustrates the Date Write Enable Bar Circuit, DWE...

...N. The code for the Date Write Enable Bar Circuit of FIG. 53 is contained in Appendix 21.

FIG. 54 illustrates Input-Output Clamp Circuit IOCLMP. Input terminal ATDOQ is connected to...

10/3,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2001 European Patent Office. All rts. reserv.

# 00341188

Storage subsystem including an error correcting cache. Speichersubsystem mit Fehlerkorrekturcache-Speicher. Sous-systeme de memoire a antememoire de correction d'erreur. PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB) INVENTOR:

Dutton, Patrick Francis, 20 Azalea Drive, Apalachin New York 13732, (US) Gregor, Steven Lee, 628 Church Street, Endicott New York 13760, (US) Li, Hehching Harry, 39 Cooventry Road, Endicott New York 13760, (US) LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 348616 A2 900103 (Basic)

EP 348616 A3 910313 EP 348616 B1 951011

APPLICATION (CC, No, Date): EP 89106935 890418;

PRIORITY (CC, No, Date): US 212432 880628

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-012/08; G06F-011/10;

ABSTRACT WORD COUNT: 108

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) EPABF1 638 CLAIMS B (English) EPAB95 558 CLAIMS B (German) EPAB95 516 CLAIMS B (French) EPAB95 654 SPEC A (English) EPABF1 77953 SPEC B (English) EPAB95 77946 Total word count - document A 78600 Total word count - document B Total word count - documents A + B 158274

...SPECIFICATION 20-1 comprises a high speed fixed control store 20-1a of 84k bytes, a pagable area (8k byte, 2k word, 4-way associative pagable area) 20-1b, a directory 20-1c for the pagable control store 20-1b, a control store address register (CSAR) 20-1d, and an 8-element...location in storage, the store must complete before the fetch is allowed. This is part of the single-image storage requirement discussed below. At the time of processor serialization, all stores pending for the processor must also be completed to storage.

1.1.2 Single-image Storage

The storage subsystem 10...or inpage freeze with storage uncorrectable error indication. Failure to do so may result in a lock-out condition as the write memory check-bit, redundant -bit, and special function registers storage command cannot complete when a quiescent processor possesses a lock, line-hold, or inpage freeze with storage uncorrectable error indication on the requested L2 cache...line-holds, or inpage freeze with storage uncorrectable error indication. Failure to do so may result

in a lock-out condition is the write memory redundant -h address registers storage command cannot complete when a quiescent processor possesses a lock, line-hold, or inpage freeze with storage uncorrectable error indication on the requested L2 cache...

...port. All four control chips within the memory cards of the selected memory port participate in the write operation, accepting a unique value for their redundant -bit address registers from the storage data buss in preset positions. Each chip contains two four-byte error checking and correction networks, each of which maintains two six-bit redundant-bit...

10/3,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2001 European Patent Office. All rts. reserv.

#### 00306062

Digital data processing system.

Digitales Datenverarbeitungssystem.

Systeme du traitement de donnees numeriques.

PATENT ASSIGNEE:

DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE) INVENTOR:

Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778, (US)

Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070, (US)

Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773, (US)

Gruner, Ronald Hans, 112 Dublin Wood Drive, Cary North Carolina 27514, (US)

Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US) Schleimer, Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514 , (US)

Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070, (US)

# LEGAL REPRESENTATIVE:

Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road, London WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 300516 A2 890125 (Basic)

EP 300516 A3 890426 EP 300516 B1 931124

APPLICATION (CC, No, Date): EP 88200921 820521;

PRIORITY (CC, No, Date): US 266413 810522; US 266539 810522; US 266521

810522; US 266415 810522; US 266409 810522; US 266424 810522; US 266421 810522; US 266404 810522; US 266414 810522; US 266532 810522; US 266403

810522; US 266408 810522; US 266401 810522; US 266524 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 67556 (EP 823025960)

INTERNATIONAL PATENT CLASS: G06F-009/46; G06F-012/14;

ABSTRACT WORD COUNT: 122

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS B (English) EPBBF1 1018 CLAIMS B (German) EPBBF1 868 CLAIMS B (French) EPBBF1 1115 SPEC B (English) EPBBF1 154256 Total word count - document A 0 Total word count - document B 157257 Total word count - documents A + B 157257

## ...SPECIFICATION 10716.

Referring now to WSM 10720 and VMMRQ 10722, as previously stated these mechanisms are concerned with the management of MEM 10112's available

address space . For example, if MHT 10716 and MFT 10718 not contain an entry for a page referenced by the current procedure, an MHT/MFT fault ...JO Ports, described above, to JP 10114. These three ports share the entire address base of MEM 10112, but IOS 10116, for example, may be limited from making full use of MEM 10112's address space. Each port has a different set of allowed operations. For example, JO Port can use... cycle later than that physical descriptors O and Length fields, as has been previously discussed.

Referring to Fig. 202, physical descriptor FN fields to be written into ATU 10228 are, in general, generated by DESP 20210. FN fields to be written into ATU 10228 are provided to ATU 10228 Data Input...

...to describe differences between the generalized cache and NC 10226. ATU 10228 and PC 10234 will then be described by description of differences between ATU 10228 and PC 10234 and the generalized cache.

Referring to Fig. 240, a partial block diagram of a generalized four-way, set associative cache is shown...

# 10/3,K/9 (Item 9 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS (c) 2001 European Patent Office. All rts. reserv.

00306058

Digital data processing system.

Digitales Datenverarbeitungssystem.

Systeme de traitement de donnees numeriques.

PATENT ASSIGNEE:

DATA GENERAL CORPORATION, (410940), Route 9, Westboro Massachusetts 01581, (US), (applicant designated states: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE) INVENTOR:

Bachman, Brett L., 214 W. Canton Street Suite 4, Boston Massachusetts 02116, (US)

Bernstein, David H., 41 Bay Colony Drive, Ashland Massachusetts 01721, (US)

Bratt, Richard Glenn, 9 Brook Trail Road, Wayland Massachusetts 01778, (US)

Clancy, Gerald F., 13069 Jaccaranda Center, Saratoga California 95070, (US)

Gavrin, Edward S., Beaver Pond Road RFD 4, Lincoln Massachusetts 01773, (US)

Gruner, Ronald Hans, 112 Dublin Wood Drive, Cary North Carolina 27514, (US)

Jones, Thomas M. Jones, 300 Reade Road, Chapel Hill North Carolina 27514, (US)

Katz, Lawrence H., 10943 S. Forest Ridge Road, Oregon City Oregon 97045, (US)

Mundie, Craig James, 136 Castlewood Drive, Cary North Carolina, (US) Pilat, John F., 1308 Ravenhurst Drive, Raleigh North Carolina 27609, (US) Richmond, Michael S., Fearringth Post Box 51, Pittsboro North Carolina 27312, (US)

Schleimer Stephen I., 1208 Ellen Place, Chapel Hill North Carolina 27514, (US)

Wallach, Steven J., 12436 Green Meadow Lane, Saratoga California 95070, (US)

Wallach, Walter, A., Jr., 1336 Medfield Road, Raleigh North Carolina 27607, (US)

LEGAL REPRESENTATIVE:

Robson, Aidan John et al (69471), Reddie & Grose 16 Theobalds Road, London WC1X 8PL, (GB)

PATENT (CC, No, Kind, Date): EP 290111 A2 881109 (Basic) EP 290111 A3 890503

EP 290111 B1 931222

APPLICATION (CC, No, Date): EP 88200917 820521;

PRIORITY (CC, No, Date): US 266404 810522

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 67556 (EP 823025960)

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS B (English) EPBBF1 1044
CLAIMS B (German) EPBBF1 890
CLAIMS B (French) EPBBF1 1185
SPEC B (English) EPBBF1 154314
Total word count - document A 0
Total word count - document B 157433
Total word count - documents A + B 157433

... SPECIFICATION as the final transfer described above. That is, a single 32 bit word will be transferred wherein non-data bits are fill bits. Bulk data storage in MEM 112 is provided in MSB 1810, which is comprised of one or more Memory Array cards (MAs) 1812. The data path into and...and generation and manipulation of logical descriptors. As previously described, with reference to CS 10110 addressing structure, logical descriptors are logical addresses, or pointers, to data stored in MEM 10112. Logical descriptors are used, for example, as architectural base pointers or microcontrol pointers in ABRs 10364 and mCRs 10366 as shown...field entry in LENGRF 20236 will contain, using the same example as previously described, a value of 70. That data item's initial bais entry written into a corresponding address space of BIASM 23910 will contain a bias value of 32. That initial bias value of 32 indicates that at least the first read operation required...resolution of Names to logical descriptors, by NC 10226; (2) translation of logical descriptors to physical descriptors, by ATU 10228; and (3) confirmation of access writes to objects, by PC 10234.

As shown in Fig. 202, NC 10226 adress input (ADR) is connected from NAME Bus 20224. NC 10226 Write Length...cycle later than that physical descriptors O and Length fields, as has been previously discussed. Referring to Fig. 202, physical descriptor FN fields to be written into ATU 10228 are, in general, generated by DESP 20210. FN fields to be written into ATU 10228 are provided to ATU 10228 Data Input...

# ...associative cache.

As such, the structure and operation of NC 10226, ATU 10228, and PC 10234 will be described by reference to and description of  $\bf a$  generalized cache similar but not necessarily identical to each of NC 10226, ATU 10228, and PC 10234. Reference will be made to NC 10226 in...

10/3,K/10 (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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# 00814145

A METHOD FOR EXECUTING A NETWORK-BASED CREDIT APPLICATION PROCESS
PROCEDE DE MISE EN OEUVRE D'UN PROCESSUS DE DEMANDE DE CREDIT EN RESEAU
Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):

CORNELIUS Richard D, 421 14th Street, Santa Monica, CA 90402, US, STEPNICZKA Andreas, 2200 Sacramento Street, Apt. 503, San Francisco, CA 94115, US,

CHU Kevin, 490 Lindbergh Place, Apt. 515, Atlanta, GA 30324, US, Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200146889 A2 20010628 (WO 0146889)

Application: WO 2000US35216 20001222 (PCT/WO US0035216)
Priority Application: US 99470805 19991222; US 99469525 19991222; US 99470039 19991222

Designated States: AL AM AU AZ BA BB BG BR BY CA CH CN CZ DE DK DM DZ
EE ES FI GB GE GH GM HR U ID IL IS JP KE KG KP KR KZ LC K LR LS LT LU
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 98671

Fulltext Availability: Detailed Description

# Detailed Description

... buyer's credit line is also earmarked in operation 1606 to indicate the amount of the purchase order to prevent the buyer from exceeding the maximum amount of credit. In operation 1608, the seller is alerted to start negotiating on the invoice. The initiation of negotiation is confirmed in operation 1610...and should be able to enter a free format description as well as the key data items specified in the data requirements section. Data and time stamps should be automatically registered and Incident and Request management staff should have access to display all open incidents and requests as well as the incident...

...given to provide a free format update of actions and investigations, to assign the incident / request to a support group, or to escalate the incident. Date and time stamps should be attached to each action and the full incident/request history should be available to the person performing the update.

Re-assign Incidents lRequests...

...and requests to be assigned to different support groups, if ftirther investigation is required.

Close Incidents 1Requests

Incidents and requests should be closed with a date and time stamp to help trend analysis and service level reporting.

Log Problems

Problems can be logged both as a result of one or more incidents, or through...

10/3,K/11 (Item 2 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00806384

NETWORK AND LIFE CYCLE ASSET MANAGEMENT IN AN E-COMMERCE ENVIRONMENT AND METHOD THEREOF

GESTION D'ACTIFS DURANT LE CYCLE DE VIE ET EN RESEAU DANS UN ENVIRONNEMENT DE COMMERCE ELECTRONIQUE ET PROCEDE ASSOCIE

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US, Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200139030 A2 20010531 (WO 0139030)

Application: WO 2000US32324 20001122 (PCT/WO US0032324) Priority Application: US 99444775 19991122; US 99447621 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK

DZ EE ES FI GB GE GH GMOR HU ID IL IS JP KE KG KP KR KZOL LK LR LS LT LU LV MD MG MK MN MW MX Z NO NZ PL PT RO RU SD SE SG STOK SL TJ TM TR TT UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 171499

Fulltext Availability: Detailed Description

Detailed Description

... The benefit areas include a revenue enhancement benefit area 402, a cost reduction benefit area 404, and a capital reduction benefit area 406.

Each benefit area includes a number of associated benefits. Illustrative benefits associated with revenue enhancement 402 include: (a) faster time to site integration; (b) better on-line network...the available supply of manufacturer offerings. The supply and demand for manufacturer offerings are compared to one another in operation 806 and this comparison is used in operation 808 to plan future supply and demand for the manufacturer offerings.

Zo In an embodiment of the present invention, collaborative forecasting may also...count if the time exceeds the limits.

The switch clock reflects local switch time and is used for all times except billing. Billing information is **recorded** in epoch **time**, which in this embodiment is UTC. The Time offset is a number reflecting the switch time relative to the UTC, that is, the offset due...

...to epoch time and back.

- i) Epoch Time + (Sign Bit \* Time Offset) = Local Switch Time 5 ii) Local Switch Time (Sign Bit \* Time Offset) = Epoch Time The switch records the Time Offset in the SER using a value where one (1) equals one (1) minute, and computes the Time Offset in seconds and adds this value...
- ...recorded. For example, Central Standard Time is six (6) hours before UTC. In this case, the Sign Bit indicates "I for negative offset and the Time Offset value recorded in the SER would be 360 (6 hours 60 minutes/hour = 360 minutes). See Figure 35 for more details on the SER record format. When...field of the 32-word call record. The 32-word call record also includes an NCBD Location (NCIDLOC) field to identify when the NCID is recorded in the AuthCode field of the call record. If the NCID Location field contains a 'I,' then the AuthCode field contains the NCID. If the NCID Location field contains a '0,' then the...parameter is shown below in Table 44A Generic Digits Parameter.

Code: 11000001

Type: 0

Byte #, Bit Description

byte 1, bits 0--4 Type of Digits : Indicates the contents of the

parameter.

This field has a binary value of'l 101 Vto indicate that the parameter contains the NCID.

byte 1, bits...

10/3,K/12 (Item 3 from file: 349)

00806383

COLLABORATIVE CAPACITY PLANNING AND REVERSE INVENTORY MANAGEMENT DURING DEMAND AND SUPPLY PLANNING IN A NETWORK-BASED SUPPLY CHAIN ENVIRONMENT AND METHOD THEREOF

PLANIFICATION EN COLLABORATION DES CAPACITES ET GESTION ANTICIPEE DES STOCKS LORS DE LA PLANIFICATION DE L'OFFRE ET DE LA DEMANDE DANS UN ENVIRONNEMENT DE CHAINE D'APPROVISIONNEMENT FONDEE SUR LE RESEAU ET PROCEDE ASSOCIE

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US, Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent:

WO 200139029 A2 20010531 (WO 0139029)

Application:

WO 2000US32309 20001122 (PCT/WO US0032309) Priority Application: US 99444655 19991122; US 99444886 19991122

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 157840

Fulltext Availability: Detailed Description

Detailed Description

... disk drive, etc. The removable storage drive 2810 reads from and/or writes to a removable storage unit 2812 in a well known manner.

Removable storage unit 2812, also called a program storage device or a computer program product, represents a floppy disk, magnetic tape, compact disk, etc. The removable storage unit 2812 includes a computer usable storage...ITU H.322 Visual Telephone Terminals over Guaranteed Quality of Service LANs ITU H.323 ITU Recommendation for Visual Telephone Systems and Equipment for Local Area Networks which provide a non-guaranteed quality of service.

ITU H.324 Recommendation for Terminals and Systems for low bitrate (28.8 Kbps) multimedia communication...Oracle as customized by the user.

Oracle 4640 - Oracle is a relational database management system.

Generate Time Key ScD t 4642 - Script which generates New Time Records from alerts in the ap

Netcool Object Server.

New Time Records 4644 -Time records corresponding to new alerts in Netcool Object Server which need to...

10/3,K/13 (Item 4 from file: 349) DIALOG(R) File 349: PCT Fulltext (c) 2001 WIPO/Univentio. All rts. reserv. METHOD FOR AFFORDING A MARKET SPACE INTERFACE BETWEEN A PLURALITY OF MANUFACTURERS AND SERVICE PROVIDERS AND INSTALLATION MANAGEMENT VIA A MARKET SPACE INTERFACE

PROCEDE DE MISE A DISPOSITION D'UNE INTERFACE D'ESPACE DE MARCHE ENTRE UNE PLURALITE DE FABRICANTS ET DES FOURNISSEURS DE SERVICES ET GESTION D'UNE INSTALLATION VIA UNE INTERFACE D'ESPACE DE MARCHE

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

MIKURAK Michael G, 108 Englewood Blvd., Hamilton, NJ 08610, US, Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, P.O. Box 52037, Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):

Patent:

WO 200139028 A2 20010531 (WO 0139028)

Application: WO 2000US32308 20001122 (PCT/WO US0032308) Priority Application: US 99444773 19991122; US 99444798 19991122

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 170977

Fulltext Availability: Detailed Description

Detailed Description
... Supply Planning
uti

component in this illustrative embodiment of the present invention may include the following.

duplication reduction, distribution facility rationalization, reduced inventories, and manufacturing capacity utilization.

With regards to the Order Management component for this illustrative embodiment, benefits for the service provider may include the following (as illustrated in Figure 4): duplication reduction, and procurement rationalization. Benefits for the manufacturer under the Order Management component in this illustrative embodiment of the present invention may include: faster order...fixed call record formats cannot handle expanded data fields as the telecommunications network becomes more complex with new features and telephone numbers.

Contemporary fixed length **record** forinats include **time** point fields **recording** local **time** in three (3) second increments where local switch time represents the time of day at a switch. The I d other network subsystems.

t mepoint...

 $\dots$  32-word call record format for the typical telephone call, which 78

comprises the majority of all telephone calls, and uses a 64-word call record format when additional information is needed regarding the call. This implementation provides the flexibility needed to efficiently manage varying data requirements of a given call into the variable call record format of the present invention.

This embodiment also records timepoints in the epoch time format. The embodiment records the origination time of a call in epoch time

format, and the remaining timepoints are offsets, or the number of seconds, from that origination time. This embodiment solves the problems associated with converting to...two (2) records are identical except for some fieldspecific information described below.

A SER is reserved for special events such as the passage of each hour mark , time changes, system recoveries, and at the end of a billing block. The SER record forinat is also described in more detail below.

Figures 36 and...contains a N, the valid field values are the digits 2

Each call record, except SER, contains call specific timepoint fields. The timepoint fields are **recorded** in epoch **time** format. Epoch time is the number of one second increments from a particular date/time in history. The embodiment of the present invention uses a...

- ...is not a limitation. It would be readily apparent to one skilled in the relevant art to implement an epoch time based on another date/time. In the records, Timepoint I represents the epoch time that is the origination time of the call 3602. The other timepoint stored in the records are the number...
- ... count if the time exceeds the limits.

The switch clock reflects local switch time and is used for all times except billing. Billing information is **recorded** in epoch **time**, which in this embodiment is UTC. The Time offset is a number reflecting the switch time relative to the UTC, that is, the offset due...

- ...time to epoch time and back.
  - i) Epoch Time + (Sign Bit \* Time Offset) = Local Switch Time
    ii) Local Switch Time (Sign Bit \* Time Offset) = Epoch **Time**The switch **records** the **Time** Offset in the SER using a value where one
    (1) equals one (1) minute, and computes the Time Offset in seconds and adds this value...
- ...recorded. For example, Central Standard Time is six (6) hours before UTC. In this case, the Sign Bit indicates "1 for negative offset and the **Time** Offset value **recorded** in the SER would be 360 (6 ...equation (11) from above, if the local switch time were midnight, the corresponding epoch time might be, for example, 1,200,000,000. Subtracting the **Time** Offset of -21,600 results in a corrected epoch time of 1,200,021,600 seconds, which is the epoch time for 6 hours after ...

10/3,K/14 (Item 5 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00784139

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A SELF-DESCRIBING STREAM IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE DE FABRICATION DESTINES A UN FLUX D'AUTODESCRIPTEURS DANS UN ENVIRONNEMENT DE MODELES DE SERVICES DE COMMUNICATION

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200116734 A2 20010308 (WO 0116734)

Application: 2000US23999 20000831 (PCT/WO 023999 Priority Application: 99387070 19990831

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 150517

Fulltext Availability: Detailed Description

# Detailed Description

... or several designs showing the layout of the structure, how different spaces fit together, how everything looks from different views, what materials are to be used , and so forth.

Step 3: Model & Test 206. Not every architectural project has this step, but in many cases, the architect will create a scale...is important to evaluate whether the application can benefit from a Netcentric style implementation immediately or in the future.

Even if a traditional client/server approach (e.g. using Visual Basic or PowerBuilder) is decided upon, the use of Netcentric concepts to produce significant reductions in software packaging and distribution... administrative personnel will face a steep leaming curve: they will need to learn UNIX, DCE, and Encina (the layers on which CICS/6000 is built). (NOTE: VIS/TP and UniKix are also implementations of CICS in the UNIX environment, but they ere not included in this evaluation.) Possible Product Options Tuxedo...

10/3,K/15 (Item 6 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00784131

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A MULTI-OBJECT FETCH COMPONENT IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR COMPOSANT DE RECUPERATION MULTI-OBJET DANS UN ENVIRONNEMENT CARACTERISE PAR DES SERVICES D'INFORMATIONS

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200116723 A2 20010308 (WO 0116723)

Application: WO 2000US24083 20000831 (PCT/WO US0024083)

Priority Application: US 99386238 19990831

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- (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
- (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
- (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD TJ TM

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Fulltext Availability: Detailed Description

# Detailed Description

.. favor keeping most business logic at the server side. Also Netcentric architectures tend to be more loosely coupled than (the still dominant two-tier) client/server systems.

49

The following sections identify the main characteristics associated with a Netcentric, Client Server or Host based technology generation. This list should in no...from the Netscape browser. Now, other browsers such as Microsoft's Internet Explorer are beginning to support Plug-in technology as well. Also, Plug-ins written for one browser will generally need to be modified to work with other browsers. Plug-ins are also operating system dependent.

Therefore, separate versions of...particular business concept, and as a whole, the Business Component Model is a depiction or portrait of the entire business. It's also important to **note** that although this begins the process of defining the application architecture for a set of desired business capabilities, the applicability of the Business Component Model

10/3,K/16 (Item 7 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00784126

SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR AN EXCEPTION RESPONSE TABLE IN ENVIRONMENT SERVICES PATTERNS

SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION DESTINES A UNE TABLE DE REPONSE D'EXCEPTION DANS DES CONFIGURATIONS DE SERVICES D'ENVIRONNEMENT

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200116706 A2 20010308 (WO 0116706)

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Priority Application: US 99387873 19990831

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability: Detailed Description

Detailed Description

extremely confusing, with many dozens or even hundreds or classes.

Flow of control. A program written with the aid of class libraries is still responsible for the flow of control (i.e., it must control the interactions among all the objects...1 00 companies. The group's building blocks are called ActiveX Controls, small, fast components that enable developers to embed parts of software in hypertext markup language (HTML) pages. ActiveX Controls work with a variety of programming languages including Microsoft Visual C++, 29

Borland Delphi, Microsoft Visual Basic programming system and...user base.

How do the vendors compare against one another? Issues to consider are type, quality and responsiveness of support, alliances/partnerships with other companies, market presence (install base, customer list, number of production copies, etc.).

vendor industry, alignment of mission and vision with that of potential customer/evaluator, product philosophy...is granted to resources through the directory.

Authentication for accessing resources across an Internet or intranet is not as simple and is a rapidly evolving area. When building e-commerce Web sites there may be a need to restrict access to areas of information and functionality to known customers or trading...and deadlines such as those associated with government regulations, contractual obligations, accounting periods, customer service, and sales lead follow-up. Typical workflow goals are shorter time to market and quicker response times. Are multiple people involved in the business process?

Is there a need for work scheduling? task.

Do integration issues exist? It...

10/3,K/17 (Item 8 from file: 349)

DIALOG(R) File 349:PCT Fulltext

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00784125

SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR PIECEMEAL RETRIEVAL IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE DE FABRICATION DESTINES A LA RECHERCHE FRAGMENTAIRE DANS UN ENVIRONNEMENT DE MODELES DE SERVICES D'INFORMATIONS

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200116705 A2 20010308 (WO 0116705)

Application: WO 2000US24085 20000831 (PCT/WO US0024085)

Priority Application: US 99386433 19990831

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- (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
- (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
- (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Fulltext Availability: Detailed Description

Detailed Description

... pieces of code, each programmer puts those pieces together in a different way.

Two different programmers can use the same set of class libraries to write two programs that do exactly the same thing but whose internal structure (i.e., design) may be quite different, depending on hundreds of small decisions...be achieved in various ways as listed below. Specialized QoS Communications Protocols - provide guaranteed QoS.

Asynchronous Transfer Mode (ATM) - ATM is a connection-oriented wide area and local area networking protocol that delivers QoS on a per-connection basis. QoS is negotiated as part of the initial connection set up and...

10/3,K/18 (Item 9 from file: 349)
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00777021

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR AN E-COMMERCE BASED USER FRAMEWORK DESIGN FOR MAINTAINING USER PREFERENCES, ROLES AND DETAILS SYSTEME, PROCEDE ET ARTICLE MANUFACTURE UTILISES EN COMMERCE ELECTRONIQUE POUR LA CONCEPTION DE STRUCTURES D'UTILISATEURS DESTINEES A PRESERVER LES PREFERENCES, ROLES ET DETAILS DES UTILISATEURS

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 's Gravenhage, The Hague, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L, Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109792 A2 20010208 (WO 0109792)

Application: WO 2000US20549 20000728 (PCT/WO US0020549)

Priority Application: US 99364091 19990730

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability: Detailed Description

Detailed Description

... Until recently, HTML has been the dominant technology used in development of Web-based solutions. However, HTML has proven to be inadequate in the following areas .

Poor performance;
Restricted user interface capabilities;
Can only produce static Web pages;
Lack of interoperability with existing applications and data; and
29
Sun Microsystem's...SAP connector component
9 Call corresponding SAP method passing in selectionCriteria.SAP may return an ADO Recordset with the business data and a second ADO

\* Call an error utility function that maps the error return codes onto the applications error handling system.

Map the return recordset...and then are freed.

Package Threading

Every time a package receives a method call, MTS creates a new thread to service the request.

At the **time** of **writing** this portion of the present description, MTS packages have a maximum limit of I 00 threads per package. If the number of the incoming concurrent...

10/3,K/19 (Item 10 from file: 349)
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Recordset with the Result codes.

00777020

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR RESOURCE ADMINISTRATION IN AN E-COMMERCE TECHNICAL ARCHITECTURE

SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR L'ADMINISTRATION DE RESSOURCES DANS UNE ARCHITECTURE TECHNIQUE DE COMMERCE ELECTRONIQUE

Patent Applicant/Assignee:

ACCENTURE LLP, Parkstraat 83, NL-2514 JG 'S Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US) Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:

HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109791 A2-A3 20010208 (WO 0109791)
Application: WO 2000US20547 20000728 (PCT/WO US0020547)

Priority Application: US 99364161 19990730

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 136396

Fulltext Availability: Detailed Description

Detailed Description

... media content that requires storage. The environment may support a high volume of media files, which must be considered in the backup/restore plans. Storage capacity planning should allow for the typically increased size of these file types.

As the amount of storage may grow significantly over time on a large...

strength of the solution and integration into your environment. There are several examples of technologies which can meet your requirements, including the use of one-time passwords, time based passwords, or challenge response schemes. Once chosen and implemented, a secure authentication mechanism can be incorporated with both your operating system and your application...

10/3,K/20 (Item 11 from file: 349)
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00777017

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A HOST FRAMEWORK DESIGN IN AN E-COMMERCE ARCHITECTURE

SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION DESTINES A LA CONCEPTION D'UNE STRUCTURE D'ORDINATEUR CENTRAL DANS UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG,'s Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US) Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L, Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109752 A2 20010208 (WO 0109752)

Application: WO 2000US20560 20000728 (PCT/WO US0020560)

Priority Application: US 99364733 19990730

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English

Fulltext Word Count: 122613

Fulltext Availability: Detailed Description

## Detailed Description

... abstract class contains methods called by the application developer objects to manage attribute values common to all persistable business objects (user id and last update timestamp). In addition, the AFPLPersistableObj class represents the superclass of a persisted object. In order to persist a business class; the application developer extends AFPLPersistableObj and...

... AFPLPersistableObj abstract methods.
The AFPLPersistableObj defines the following methods.

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Return the column names common to all persistable business objects (user id and last update timestamp). The application developer invokes this method from the constructor method of a business object, Return attributes common to all persistable business objects (user id and last update timestamp). The application developer invokes this method from the getPersistedAttributes method of a business

Abstract method that all Business Objects must implement. If the passed in attribute. is one of the attributes common to all persistable business objects (user id and last update timestamp), compare the passed in value to the currently held attribute value. The application developer should also invoke the superclass isEqu- al.

Abstract method that all...

...implement. Set the value of the attribute passed as parameter
Set the user id value
97
Return the user id value
Set the last update timestamp value
Return the last update timestamp value.

lei Adds the last update **timestamp** value and user id to the passed in persistable business object.

The application developer invokes this method from the setUserldTimeStamptoObj method of a business object...

#### ...names.

Return all the attributes to persist. The application developer invokes the addPersistedAttribute method of the super class to add user id and last update timestamp attributes.

Return the primary key field name.@@--Return all the primary key values.

Return vector of all key attributes.

Return the array of all key...action during the session, activity components accessed during the session, and business components accessed during the session. During the session, the current page, previous page record, and information I O are provided to at least one activity component in operation 1810. Also in operation 1810, the activity component generates output based...

...activity
Activit
,y. Component -context
Business Component context - shared amon g- activities,
Register listener
Broadcast Message to registered listeners
Encode Database User Name and Password
Note: Encoding implemented only once (as part of system ...Sets the HTML caption value of the object. The, text may be

Sets the HTML name of the checkbox Mark as checked the checkbox when generating it Mark as not checked the checkbox when generating it.

Sets the HTML value of the checkbox
Add an...database connection from application
Database mapping
Map an object to a database table
Oby.ect query
Trigger queries on objects
Easily iterate through the results

displayed next to the checkbox object.

Record locking
Optimistic locking
Pessimistic locking
199
Event Register event
Handler Create event
Maintain event reference
Process event
Information
Warning
Logical Unit of Work

Display...these functions need to understand how their support roles may change, and what new demands the technology infrastructure may place upon them. Ensuring that these areas are comfortable supporting the new infrastructure, and that they are able to troubleshoot problems is critical to the overall support and success of the business...Ex. "C: Oracle

ReTA"

At this point a full operating system backup should be made, and the backup set stored. In future, if the database **server** goes down, this **backup** may be used to quickly restore the server to a point where the Oracle Recovery Manager can take over and complete the backup.

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Add...pre-installation suggestions and the installation steps required for setup and configuring Site Server 3.0 Commerce Edition.

Pre-histallation Suggestions
Do not install Site Server on a Backup Domain Controller.

Do not install Exchange Server on a Site Server. Both products are resource intensive.

Do not install Proxy Server on a Site Server...

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00777011 \*\*Image available\*\*

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A CODES TABLE FRAMEWORK DESIGN IN AN E-COMMERCE ARCHITECTURE

SYSTEME, PROCEDE ET ARTICLE FABRIQUE POUR LA CONCEPTION D'UNE STRUCTURE DE TABLES DE CODES DANS UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 'S Gravenhage, The Hague, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US,

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Application: WO 2000US20705 20000728 (PCT/WO US0020705)

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- (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
- (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
- (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
- (EA) AM AZ BY KG KZ MD RU TJ TM

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Fulltext Availability: Detailed Description

#### Detailed Description

... strength of the solution, and integration into your environment. There are several examples of technologies which can meet your requirements, including the use of one-time passwords, time based passwords, or challenge response schemes. Once chosen and implemented, a secure authentication mechanism can be incorporated with both your operating system and your application...its ability to integrate with the execution and development environments.

Supporting Infrastructure

The supporting infrastructure is the subset of operating systems, utilities, languages, and protocols **used** to support the management of the system. The supporting infrastructure is most often determined by the execution and development environments and the business applications on

10/3,K/22 (Item 13 from file: 349)
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00739517 \*\*Image available\*\*

# A HIGH PERFORMANCE NETWORK INTERFACE INTERFACE RESEAU HAUTE PERFORMANCE

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US (Residence), US (Nationality)

Inventor(s):

MULLER Shimon, Apartment D, 983 La Mesa Terrace, Sunnyvale, CA 94086, US GENTRY Denton, 34892 Sea Cliff Terrace, Fremont, CA 94555, US WATKINS John, 1469 Yukon Drive, Sunnyvale, CA 94087, US CHENG Linda, 1318 Burkette Drive, San Jose, CA 95129, US Legal Representative:

VAUGHAN Daniel E, Park & Vaughan LLP, Suite 5, 399 Sherman Avenue, Palo Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US5349 20000229 (PCT/WO US0005349)

Priority Application: US 99259765 19990301

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(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 78802

Fulltext Availability: Claims

## Claim

efficient manner. For example, rather than providing data from one packet at a time (and one byte at a time) in separate "copy" operations, a "page-flip" operation may be performed. In a page-flip, an entire memory page...a cache line of storage (e.g., sixty-four bytes for a SolariSTMworkstation) is skipped in the buffer before storing each packet. The extra padding area may be used by software that processes

the packets and/or the completion descriptors. The soft are may use the extra padding area for Suting or as temporary storage for information needed in a secondary or later phase of processing. For example, before actually processing the packet, the software may store some data that promotes efficient multi-tasking in the...

...much larger FDDI (Fiber Distributed Data Interface) header. One skilled in the art will recognize the size disparity between these headers. Advantageously, the reserved padding area may be used for the FDDI header rather than allocating another block of memory. In a present embodiment of the invention DMA engine 120 may determine which category

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00523342

METHOD AND APPARATUS FOR MONITORING PLASMA PROCESSING OPERATIONS PROCEDE ET DISPOSITIF DE SURVEILLANCE DES OPERATIONS DE TRAITEMENT AU

Patent Applicant/Assignee: SANDIA CORPORATION, Inventor(s): SMITH Michael Lane Jr, STEVENSON Joel O'Don, WARD Pamela Denise Peardon, Patent and Priority Information (Country, Number, Date): Patent: WO 9954694 A1 19991028 Application: WO 99US8894 19990423 (PCT/WO US9908894) Priority Application: US 9865203 19980423; US 9864966 19980423; US 9865245 19980423; US 9865006 19980423; US 9865359 19980423; US 9864793 19980423; US 9864957 19980423; US 9865680 19980423; US 9864991 19980423 ; US 9865257 19980423; US 9865307 19980423; US 9865274 19980423; US 9864970 19980423; US 9865247 19980423; US 9864965 19980423; US 9865195 19980423; US 9865362 19980423; US 9864972 19980423; US 9865358 19980423 Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG Publication Language: English

Fulltext Word Count: 122146

Fulltext Availability: Detailed Description

#### Detailed Description

a comparison of the current optical emissions of the plasma in the chamber with optical emissions of the plasma in the chamber from a previous time in the same process, preferably the immediately preceding time at which optical emissions were obtained. In one embodiment, these optical emissions include at least wavelengths...be displayed. such as on a computer monitor or the like for review by operations personnel. From this plot, another plot of the change in area of the optical emissions in the second wavelength region over time may be generated. This plot may also be displayed, such as on a computer...main data entries 350. The optical emissions data within the normal spectra subdirectory 288 of Figure 10 may be consolidated or condensed to eliminate the storage redundant data, to increase the speed of the search of the normal spectra subdirectory 288 by the current plasma process module 250, or both. Figure 1...

n file: 349) 10/3,K/24 (Item 15 f DIALOG(R) File 349: PCT Fulrext (c) 2001 WIPO/Univentio. All rts. reserv. 00456834 COMMUNICATION

SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SWITCHED TELEPHONY SYSTEME PROCEDE ET ARTICLE CONCU POUR LES COMMUNICATIONS TELEPHONIQUES PAR

RESEAU COMMUTE Patent Applicant/Assignee:

MCI WORLDCOM INC,

Inventor(s):

ZEY David A,

Patent and Priority Information (Country, Number, Date):

WO 9847298 A2 19981022

WO 98US7927 19980415 (PCT/WO US9807927) Application: Priority Application: US 97835789 19970415; US 97834320 19970415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN

Publication Language: English Fulltext Word Count: 156638 Fulltext Availability: Detailed Description

Detailed Description

... Welcome Servers 450 run the daemon in normal as well as secure mode, while the Application Servers only run the secure mode daemon.

The Token Server (s) run a TCP service that runs on a well known port

ease of connection from within the DMZ. The Token Service daemon uses... raised above was that of bandwidth usage. Indeed

10 kbps half duplex (a little more when both parties occasionally speak at

i 66

the same time, but much less during periods of silence) is considerably

than 64 kbps full duplex dedicated capacity. Two points should be noted on this argument...can automatically update the User Profile in the Directory Service for

user who was authenticated, depositing the following information "User Name" "Account Code" "online timestamp"

"Access Device Site Code"

Later, when the Client Computer requires access through an Internet Telephony Gateway, it queries the Directory Service 1082 to determine the ...at 1102, after successful update of the profile associated with the ID, the directory service sends a response (ACK) back to the specified IP address indicating that the message was received and processed. When the computer (PC 12) receives this response message it may choose to notify the user via a...at 1202, after successful update of the profile associated with the ID, the directory service sends a response (ACK) back to the specified IP address indicating that the message was received and processed. When the computer (PC 12) 1 5 receives this response message it may choose to notify the user... which is vulnerable to human error and delay topology updates. Configuration of these systems usually requires that the system be down for a period of time . Many systems available in the industry

intended for a particular vendor's PMU 106, and actually obtain topology data from their PMUs 106, thereby...

00375280 STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND SUPPORT DE FLUX DECALE POUR VIDEO A LA DEMANDE Patent Applicant/Assignee: EMC CORPORATION, Inventor(s): VAHALIA Uresh K, FORECAST John, TZELNIC Percy, Patent and Priority Information (Country, Number, Date): Patent: WO 9716023 A1 19970501 Application: WO 96US17156 19961028 (PCT/WO US9617156) Priority Application: US 955988 19951027; US 96661053 19960610 Designated States: AL AM AT AU BA BB BG CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG Publication Language: English Fulltext Word Count: 18381 Fulltext Availability: Claims Claim for the track. In this fashion, the track can be retained in the cache until it is fetched by the process. In step 126 a time stamp for the track could also be reset to the current time, and used by a background process in the ICDA to determine whether any track...MPEG I or MPEG II)\* Second, each stream server PC can be configured with a maximum amount of RAM available as a buffer memory. This maximum amount of memory may limit the size of the window on a single stream server PC, The number of stream server PCs required for storing an entire movie in RAM...not have a free network that would be needed for satisfying the request. In general, a stream server PC has a total buffer memory limitation and a number of bandwidth limitations. The bandwidth limitations include a network bandwidth limitation, a throughput or buffer bandwidth limitation, and a bus bandwidth limitation...reject the client request. otherwise, in step 181, a server window RAM is assigned to the movie, and a task is initiated to load this server window RAM with duplicate movie data fetched from the ICDA, If more than one stream server PC has an unallocated window, then one of these stream servers should be...to FIG. 19, there is shown a schematic diagram illustrating the flow of data through the file server (20 in FIG. 1) in a "network backup" operation, The stream servers 21 serve to funnel data from clients on the network 25 into the integrated cached disk array 23, The stream servers accept data at a rate on the order of, typically, several megabits per second from each network client (as determined by the existing network connections

client (as determined by the existing network connections and remote backup application capabilities). Each stream server sends data to the integrated cached disk array 23 at a rate which is the aggregate of all the streams received by the stream server and can be on the order of about fifty to 5 one hundred megabits per second. The integrated cached disk array in turn sends the backup data to the tape silo 24 at the rate allowed by the capabilities of the tape silo -typically on the order of 2 to 20...South Street, Hopkinton, Massachusetts 01748, The backup software includes a backup scheduler 201, a volume manager 202, and a save/restore data mover 203. The backup software

in the file server (20 m FIG, 1) is adapted from the Figh (trademark) Hierarchical Storage Management (HSM) software by splitting the save/restore data mover 203 from the...the active one of the controller servers 28, 29 to select one of the stream servers to function as a data mover. The selected stream server moves the backup data from the network client to allocated tracks in the integrated cached disk array. Later, this same stream server or another selected stream server moves the backup data from the integrated cached disk array to the tape silo, When the backup data has been written to allocated disk or tape storage, the catalog 204 is updated to indicate that...

2:INSPEC 1969-2001 ct W2
(c) 2001 Institution of Electrical Engineers File File 8:Ei Compendex(R) 1970-2001/Oct W2 (c) 2001 Engineering Info. Inc. File 6:NTIS 1964-2001/Oct W4 (c) 2001 NTIS, Intl Cpyrght All Rights Res File 99: Wilson Appl. Sci & Tech Abs 1983-2001/Aug (c) 2001 The HW Wilson Co. File 144: Pascal 1973-2001/Oct W2 (c) 2001 INIST/CNRS 77:Conference Papers Index 1973-2001/Sep (c) 2001 Cambridge Sci Abs File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info 34:SciSearch(R) Cited Ref Sci 1990-2001/Oct W2 (c) 2001 Inst for Sci Info File 233: Internet & Personal Comp. Abs. 1981-2001/Oct (c) 2001 Info. Today Inc. File 238: Abs. in New Tech & Eng. 1981-2001/Sep (c) 2001 Reed-Elsevier (UK) Ltd. 65:Inside Conferences 1993-2001/Oct W2 (c) 2001 BLDSC all rts. reserv. File 94:JICST-EPlus 1985-2001/Sep W3 (c) 2001 Japan Science and Tech Corp(JST) File 35:Dissertation Abs Online 1861-2001/Oct (c) 2001 ProQuest Info&Learning File 202:Information Science Abs. 1966-2001/ISSUE 07 (c) Information Today, Inc Set Items Description S1 30788 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM-ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR -FILES OR RAID? ? OR DISK(2N)ARRAY?) S2 TIMESTAMP? OR (TIME (NOT 2N) REAL OR DAY OR DATE OR HOUR? OR MINUTE?) (2N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? -OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?) S3 1123762 (REACH? OR LIMIT? OR ACHIEV?) (5N) (CAPACITY OR MAXIMUM? OR -UPPER()LIMIT? ?) OR FILL??? OR FULL OR USED()UP S4 1158617 (SPACE? ? OR AREA? ?) (3N) (FULL OR USED OR FILLED) OR S3 S5 13 S1 AND S2 AND S4 S6 11 RD (unique items) ?

01159068 INSPEC Abstract Number: C78005818

Title: A direct access terabit laser archival memory

Author(s): Heard, H.G.

Author Affiliation: Inst. for Advanced Computation, Ames Res. Center, NASA, Moffett Field, CA, USA

Conference Title: Proceedings on very large data bases p.254-8

Publisher: IEEE, New York, NY, USA

Publication Date: 1977 Country of Publication: USA 570 pp.

Conference Sponsor: ACM; IEEE

Conference Date: 6-8 Oct. 1977 Conference Location: Tokyo, Japan

Language: English Document Type: Conference Paper (PA)

Abstract: This paper addresses recent developments in terabit-level laser archival memory storage technology. The laser memory employs a 500 milliwatt 514.5 nanometer wavelength argon-ion optical laser source to melt permanent bit patterns into a rhodium-coated flexible plastic data storage strip. The same laser, operated at an order of magnitude less power output, is used to read the stored binary data. Information densities of 2.5\*10/sup 7/ bits per square inch are achieved as limited by tracking and beam spot Because each data record is permanent, truly archival storage ( approximately 25 years) is only limited by dust build-up. Extensive error correction codes enable performance at the 10/sup -10/ bit error rate level. The system is supported by extensive software that provides call-by-name file Operating access. at peak data rates of 5 megabits/second, the system behaves as an on-line direct-access file, with an on-line capacity equivalent to several thousand 1600 BPI 2400-foot rolls of magnetic tape. Worst case access time to any record is of the order of seconds. Average user-data transfer rates can be as high as 2.86 megabits per second with full data redundancy . (6 Refs)

Subfile: C

Descriptors: optical stores

Identifiers: direct access; terabit; laser archival memory; flexible

plastic data storage strip

Class Codes: C5320K (Optical storage); C6120 (File organisation)

#### 6/5/2 (Item 1 from file: 8)

DIALOG(R) File 8:Ei Compendex(R)

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04580198 E.I. No: EIP96123475977

Title: Computer-based electronic fall-through probe insect counter for monitoring infestation in stored products

Author: Shuman, D.; Coffelt, J.A.; Weaver, D.K.

Corporate Source: USDA-Agricultural Research Service, Gainesville, FL, USA

Source: Transactions of the ASAE v 39 n 5 Sep-Oct 1996. p 1773-1780

Publication Year: 1996

CODEN: TAAEAJ ISSN: 0001-2351

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 9702W2

Abstract: Current commercial infestation monitoring methods for insect pests of stored products are labor intensive, expensive, and insensitive to low population densities. An automated system has been developed to provide continuous monitoring of insects at multiple sites within large volumes of stored products and to remotely display acquired data indicative of infestation levels at these sites. The system uses custom-designed infrared beam sensor heads to detect insects that crawl into and drop through perforated cylindrical tubes (modified commercial grain probe traps) distributed throughout the storage volume. Sensor outputs are transmitted to a computer that analyzes the signals and makes time -stamped records of detections. The software also includes system self-testing, automatic data backup and recovery, and data management utilities. Laboratory

testing across the **full** ange of pertinent species' size sulted in counting accuracy ranging rom 88 to 99%. By employing a mullar design, the system's size and features can be configured for a variety of applications such as a laboratory instrument, a small farm bin, or a large grain elevator complex. (Author abstract) 12 Refs.

Descriptors: \*Pest control; Food storage; Grain (agricultural product); Probes; Computer aided analysis; Automation; Sensors; Computer software Identifiers: Computer based electronic fall through probes; Custom designed infrared beam sensor heads; Insect counters

Classification Codes:

461.9.1 (Immunology)

461.9 (Biology); 694.4 (Storage); 822.1 (Food Products Plants & Equipment); 821.4 (Agricultural Products); 723.5 (Computer Applications) 461 (Biotechnology); 694 (Packaging & Storing); 822 (Food Technology); 821 (Agricultural Equipment & Methods); 943 (Mechanical & Miscellaneous Measuring Instruments); 723 (Computer Software)

46 (BIOENGINEERING); 69 (MATERIALS HANDLING); 82 (AGRICULTURE & FOOD TECHNOLOGY); 94 (INSTRUMENTS & MEASUREMENT); 72 (COMPUTERS & DATA PROCESSING)

# 6/5/3 (Item 1 from file: 6)

DIALOG(R) File 6:NTIS

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0566300 NTIS Accession Number: AD-A028 358/0/XAB

Evaluation of a Diving Log Form to Replace OPNAV Form 9940

(Final rept) Carter, R.

Navy Experimental Diving Unit Panama City Fla

Corp. Source Codes: 253650

Report No.: NEDU-2-76

1976 12p

Journal Announcement: GRAI7621

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

A proposed diving log form and the Standard Navy Diving Log Form (OPNAV 9940) were used by five Navy divers to record eight diving scenarios. The completion time and the number of errors made on each log were recorded. These data were subjected to statistical tests to determine whether the new form was superior. The two diving log forms were identical with respect to the number of errors they evoked from the divers who filled them out. The two forms were also identical with respect to the time required to record simple, no-decompression, and the accident-free diving scenarios. However, the proposed new diving log saved divers an average of 40% of the time required, using OPNAV 9940, to record complex diving scenarios. The proposed diving log form was preferred by the divers because it does not required an inconvenient overlay to aid completion, as does the OPNAV 9940.

Descriptors: Forms(Paper); \*Diving; Records; Time; Data acquisition

; Replacement ; Statistical analysis

Identifiers: \*Standard Navy diving log form; Scenarios; NTISDODXA Section Headings: 88B (Library and Information Sciences--Information Systems)

# 6/5/4 (Item 1 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci (c) 2001 Inst for Sci Info. All rts. reserv.

04985234 Genuine Article#: UY203 Number of References: 67

Title: A CONCERTED TRYPTOPHANYL-ADENYLATE-DEPENDENT CONFORMATIONAL CHANGE IN BACILLUS-SUBTILIS TRYPTOPHANYL-TRANSFER-RNA SYNTHETASE REVEALED BY THE FLUORESCENCE OF TRP92

Author(s): HOGUE CWV; DOUBLIE S; XUE H; WONG JT; CARTER CW; SZABO AG Corporate Source: UNIV WINDSOR, DEPT CHEM & BIOCHEM/WINDSOR/ON

N9B3P4/CANADA/; UNIV NDSOR, DEPT CHEM & BIOCHEM/WIND ON N9B3P4/CANADA/; UNIV TAWA, DEPT BIOCHEM/OTTAWA/ON K1. M5/CANADA/; UNIV N CAROLINA, DEPT BIOCHEM & BIOPHYS CB 7260/CHAPEL HILL//NC/27599; UNIV TORONTO, DEPT BIOCHEM/TORONTO/ON M5S 1A8/CANADA/

Journal: JOURNAL OF MOLECULAR BIOLOGY, 1996, V260, N3 (JUL 19), P446-466 ISSN: 0022-2836

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA; CANADA

Subfile: SciSearch; CC LIFE--Current Contents, Life Sciences Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY

Abstract: A semi-conserved tryptophan residue of Bacillus subtilis tryptophanyl-tRNA synthetase (TrpRS) was previously asserted to be an essential residue and directly involved in tRNA(Trp) binding and recognition. The crystal structure of the Bacillus stearothermophilus TrpRS tryptophanyl-5'-adenylate complex (Trp-AMP) shows that the corresponding Trp91 is buried and in the dimer interface, contrary to the expectations of the earlier assertation. Here we examine the role of this semi-conserved tryptophan residue using fluorescence spectroscopy. B. subtilis TrpRS has a single tryptophan residue, Trp92. 4-Fluorotryptophan (4FW) is used as a non-fluorescent substrate analog, allowing characterization of Trp92 fluorescence in the 4-fluorotryptophanyl-5'-adenylate (4FW-AMP) TrpRS complex. Complexation causes the Trp92 fluorescence to become quenched by 70%. Titrations, forming this complex under irreversible conditions, show that this quenching is essentially complete after half of the sites are filled . This indicates that a substrate-dependent mechanism exists for the inter-subunit communication of conformational changes. Trp92 fluorescence is not efficiently quenched by small solutes in either the apo- or complexed form, from this we conclude that this tryptophan residue is not solvent exposed and that binding of the Trp92 to tRNA(Trp) is unlikely.

Time -resolved fluorescence indicates conformational heterogeneity of B. subtilis Trp92 with the fluorescence decay being best described by three discrete exponential decay times. The decay-associated spectra (DAS) of the apo- and complexed- TrpRS show large variations of the concentration of individual fluorescence decay components. Based on recent correlations of these data with changes in the local secondary structure of the backbone containing tire fluorescent tryptophan residue, we conclude that changes observed in Trp92 time-resolved fluorescence originate primarily from large perturbations of its local secondary structure.

The quenching of Trp92 in the 4FW-AMP complex is best explained by the crystal structure conformation, in which the tryptophan residue is found in an alpha-helix, The amino acid residue cysteine is observed clearly within the quenching radius (3.6 Angstrom) of the conserved tryptophan residue. These tryptophan and cysteine residues are neighbors, one helical turn

Descriptors--Author Keywords: AMINOACYL-TRANSFER-RNA SYNTHETASE; ENZYME MECHANISM; TRYPTOPHAN ANALOGS; CONFORMATIONAL HETEROGENEITY

Identifiers--KeyWords Plus: TRANSFER-RNA-SYNTHETASE; RIBONUCLEIC ACID SYNTHETASE; ESCHERICHIA-COLI; NUCLEOTIDE-SEQUENCE; TRANSFER RNA(TRP); STRUCTURAL GENE; PROTEIN; RESOLUTION; ENZYME; DECAY

Research Fronts: 94-3360 002 (ESCHERICHIA-COLI GLUTAMINYL-TRANSFER-RNA SYNTHETASE; ASSOCIATION OF TRNA(GLN) ACCEPTOR IDENTITY; AMINOACYLATION REACTION)

94-0083 001 (2.8 ANGSTROM RESOLUTION; REFINED CRYSTAL-STRUCTURE; KNOWLEDGE-BASED PROTEIN MODELING)

94-4806 001 (GENE ORGANIZATION; LONG-CHAIN FATTY-ACID TRANSPORT; TRANSCRIPTION FACTOR)

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BRONSKILL PM, 1988, 9, P305, BIOCHEM J CARTER CW, 1990, V46 57, ACTA CRYSTALLOGR A CARTER CW, 1993, V62, P715, ANN REV BIOCH CARTER CW, 1979, V254, P2219, J BIOL CHEM CARTER CW, 1988, V90, P168, J CRYST GROWTH CARTER CW, 1994, V238; P346, J MOL BIOL CHOW KC, 1988, V73, P537, GENE CHOW KC, 1992, V267, P9146, J BIOL CHEM COLEMAN DE, 1988, THESIS U N CAROLINA COWGILL RW, 1976, P441, BIOCH FLUORESCENCE C COWGILL RW, 1967, V140, P37, BIOCHIM BIOPHYS ACTA DAHMS TD, 1995, V69, P569, BIOPHYS J DAHMS TD, 1995, V117, P2321, J AM CHEM SOC DOUBLIE S, 1995, V3, P17, STRUCTURE EFTINK MR, 1976, V15, P672, BIOCHEMISTRY-US EFTINK MR, 1977, V16, P5546, BIOCHEMISTRY-US EFTINK MR, 1991, V35, P127, METHOD BIOCHEM ANAL EISINGER J, 1969, V9, P247, PHOTOCHEM PHOTOBIOL FERSHT AR, 1987, V26, P6030, BIOCHEMISTRY-US FRASER CM, 1995, V270, P397, SCIENCE FREIST W, 1989, V28, P6787, BIOCHEMISTRY-US FROLOVA LY, 1993, V212, P457, EUR J BIOCHEM FROMANT M, 1981, V63, P541, BIOCHIMIE GILL SC, 1989, V182, P319, ANAL BIOCHEM GREGORET LM, 1991, V9, P99, PROTEINS HALL CV, 1982, V257, P6132, J BIOL CHEM HOGUE CWV, 1993, V48, P159, BIOPHYS CHEM HOGUE CWV, 1992, V267, P3340, J BIOL CHEM HUTNIK CML, 1990, V265, P1456, J BIOL CHEM IMOTO T, 1989, P266, PROTEIN FUNCTION PRA JOSEPH DR, 1971, V246, P7602, J BIOL CHEM JOSEPH DR, 1971, V246, P7610, J BIOL CHEM KLOTZ IM, 1989, P25, PROTEIN FUNCTION PRA KNUTSON JR, 1983, V102, P501, CHEM PHYS LETT KUEHL GV, 1976, V251, P3254, J BIOL CHEM LAKOWICZ JR, 1983, PRINCIPLES FLUORESCE LEE ML, 1974, V33, FASEB J 2 MACMANUS JP, 1989, V264, P3470, J BIOL CHEM MERLE M, 1986, V25, P1115, BIOCHEMISTRY-US MIRANDE M, 1991, V40, P95, PROG NUCLEIC ACID RE MUENCH KH, 1976, V251, P5195, J BIOL CHEM MUENCH KH, 1975, V187, P1089, SCIENCE NEVINSKY GA, 1974, V43, P135, FEBS LETT OMNAAS J, 1979, V38, P821, FASEB J ROSS JBA, 1992, V31, P1585, BIOCHEMISTRY-US ROULD MA, 1989, V246, P1135, SCIENCE SAMBROOK J, 1989, MOL CLONING LAB MANU SEVER S, 1996, V35, P32, BIOCHEMISTRY-US SHI W, 1989, V68, P492, BIOCH CELL BIOL SHIBA K, 1992, V267, P2703, J BIOL CHEM SZABO AG, 1983, V41, P233, BIOPHYS J SZABO AG, 1980, V102, P554, J AM CHEM SOC VALEUR B, 1977, V25, P441, PHOTOCHEM PHOTOBIOL WILLIS KJ, 1989, V28, P4902, BIOCHEMISTRY-US WILLIS KJ, 1994, V66, P1623, BIOPHYS J WILLIS KJ, 1990, V51, P375, PHOTOCHEM PHOTOBIOL WINTER GP, 1977, V80, P340, FEBS LETT XU ZJ, 1989, V264, P4304, J BIOL CHEM XUE H, 1993, V268, P9316, J BIOL CHEM XUE H, 1993, V613, P247, J CHROMATOGR-BIOMED YAMAMOTO Y, 1972, V45, P1362, B CHEM SOC JPN

6/5/5 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2001 Inst for Sci Info. All rts. reserv.

04230834 Genuine Article#: RP978 Number of References: 15

. Title: 3D-ECHOCARDIOGRAP - MATHEMATICAL BASIS AND TECHNIL REALIZATION

Author(s): WOLLSCHLAGER

Corporate Source: UNIV FREIBURG, MED KLIN, KARDIOL & ANGIOL ABT, HUGSTETTER

STR 55/D-79106 FREIBURG//GERMANY/

Journal: HERZ, 1995, V20, N4 (AUG), P225-235

ISSN: 0340-9937

Language: GERMAN Document Type: ARTICLE

Geographic Location: GERMANY

Subfile: SciSearch; CC CLIN--Current Contents, Clinical Medicine

Journal Subject Category: CARDIOVASCULAR SYSTEM

Abstract: The ultimate goal of any imaging technique for the investigation of the anatomy of the beating heart is a 3D-display of the cardiac morphology throughout a complete heart cycle. The reason for this interest is quite clear: 3D-imaging has the potential for a better understanding of the individual morphology under normal and pathological conditions and especially, if complex therapeutic decisions have to been made. In the clinical practice, the echocardiographer attempts to obtain a spatial information by a mental reassembling of the 2D echocardiographic images, that are obtained from different imaging planes. This procedure, however, is very subjective and, thus, highly susceptible for errors. Therefore, the 3D-echocardiography has been developed to replace this mental process by an ''objective'' and reproducible computerized reconstruction.

Prerequisite for such a 3D-surface reconstruction is a cubic, isotropic digital data set with cubic data volumes, so called ''Voxels'' (Figure 1). The term ''isotropic'' means, that the resolution is identical in all directions, and that the data density within the cube is homogeneous. Those cubes are the mathematical basis for any SD-reconstruction. At the first step on the way to 3D-images, the data cubes have to be **filled** with 2D echo information. So far, three principal modalities of image acquisition are available for the clinical routine: parallel scanning from the esophagus (Figure 2), rotational scanning (transesophageal - Figure 3a - or transthoracic - Figure 3b).

In all cases, the imaging planes are incremented by an external stepper motor using a dedicated computer logic for gated image acquisition. At the present time, despite geometrical shortcomings, the TEE omniplane probe with rotational scanning is the most widely used system. It can be applied for standard investigations as well as for ''3D''-data acquisition after only minor modifications.

The process of 3D-reconstruction is a sequence of repeated steps of image processing. The first step is the elimination of a problem, that is common to all image reconstruction techniques from tomographic information: the imaging planes are **recorded** at different **time** points, and mostly under varying conditions. Although several gating techniques are implemented into the image acquisition, some variability is unavoidable, simply because neither the heart nor the surroundings can be frozen during image acquisition. Therefore, a lot of artifacts (Figure 4) can be introduced by:

variations of the heart rate,

movement of the heart relative to the probe, and

unstability of the transducer.

Some very sophisticated image processing algorithms for the identification, compensation, interpolation, and elimination of those artifacts have been developed and are applied to the acquired sets of 2D images.

The next use of image processing on the way to a 3D-visualization is rather similar: the single imaging planes of the data cubes are recorded at different angles of view, resulting in non-homogeneous data density. This problem is important in rotational scanning (Figure 5): the rotation of the imaging planes around a central axis results in

oversampling of reducent data near the axis of rotation and in undersampling in the ripheral parts. After data acquition, a lot of image processing is needed for the compensation of this non isotropy: redundant data have to be eliminated and missing ones have to be interpolated. However, each of these multiple steps of artifact-correction and compensation of inhomogeneous data density means a manipulation of the raw data.

Sometimes, the result may be heavy smoothing of details or even the addition of new pseudo-structures.

After these preprocessing steps, the data cubes can be cut in every direction in real-time, resulting in any desired secondary imaging plane. This can be done without the patient remaining in the echo lab at any time with a dedicated viewing station, where up to 6 different tomographic views can be displayed in motion (Figure 6).

However, the ultimate result of a SD-reconstruction is a perspective view with a realistic surface structure: first, the spatial surface is computed with a so called ray searching technique, i.e. surface points are defined with a sophisticated segmentation process along rays which are constructed through the data cubes (Figure 7). The result is a reconstruction of different surface-layers, which are of only minor interest, because they are far away from the photorealistic perspective we are looking for. Therefore, the data again have to be processed in order to add a shaded surface to the computed structures. During the past few years a lot of software development was done to optimize the steps of surface shading to achieve a realistic impression of the anatomical details. So far, three basic methods for surface shading of the reconstructed images are available:

Distance shading results in rather smooth surfaces with few structural details, but gives an excellent spatial impression (Figure 8a).

Gradient shading - which simulates an electronically illumination - results in quite realistic and detailled views, but is highly susceptible to artifacts in the raw data (Figure 8b), and the Spatial texture method where a surface is computed which retains the characteristic appearance of echo images (Figure 8c).

None of these shading techniques is appropriate and optimal for all cases. Therefore, an individually weighted addition of the three surface shading techniques is the way to get realistic results (Figure 8d). The amount of each of the three surface components has to be selected individually, depending on the image characteristics of the single case.

This new technique of 3D-echocardiography allows for the generation of impressive new views of the beating heart. However, despite of all the fascination, the clinician always has to keep in mind some important limitations:

3D-echocardiographic views are always synthetic, computed images and are the result of repeated steps of image processing. Thus, these views are susceptible to artifacts and overmanipulation and have to be interpreted with caution. This is of special importance, because

an anesthetically impressive result of a 3D-reconstruction is possible even from data sets with low quality (Figure 9).

The medical quality of the reconstructed images, however, depends only on the quality of the raw data. Therefore, the echocardiographer has to be familiar with the methods and problems of image acquisition, image processing, and image reconstruction to estimate the quality of the data set and thus, the clinical relevance of the SD-results.

Identifiers--KeyWords Plus: ECHOCARDIOGRAPHY

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## 6/5/6 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00429054 96WN07-033

# Leisurely drive ensures safe data: TEAC Tape1600

Methvin, David W

Windows Magazine , July 1, 1996 , v7 n7 p144, 1 Page(s)

ISSN: 060-1066

Company Name: TEAC America Product Name: TEAC Tape1600

Languages: English

Document Type: Hardware Review Grade (of Product Reviewed): B

Hardware/Software Compatibility: IBM PC Compatible; Microsoft Windows;

Microsoft Windows 95

Geographic Location: United States

Presents a favorable review of the TEAC Tape1600 (\$179), a tape drive from TEAC America (213). Runs with IBM PC compatibles with Windows 3.1x or 95. Indicates that the TEAC Tape1600 installs easily into an internal 3.5-inch or 5.25-inch bay, and it offers 800MB capacity using uncompressed data, and up to 1.6GB of compressed data. Comes with Arcada Backup software, and notes that under Windows 95, this program can save and restore your Registry. Reports that a full backup of 11,099 files containing 681MB of data took one hour, 33 minutes, and a selective restore of 529 files with 79MB of data required 16 minutes. Notes that the TEAC Tape1600 package includes a cable that plugs directly into the floppy controller, which makes it much more flexible to hook up the tape drive and floppy drive. Rates the TEAC Tape1600 three out of five Windows. Includes a product summary. (jo)

Descriptors: Tape Drive; Backup ; Hardware Review; Information

Storage

Identifiers: TEAC Tape1600; TEAC America

# 6/5/7 (Item 2 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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#### 00170477 88PW06-014

# Background backup

Hogan, Mike

PC World , June 1, 1988 , v6 n6 p107-108, 2 Pages

ISSN: 0737-8939 Languages: English

Document Type: Product Announcement

Hardware/Software Compatibility: IBM PC; IBM PC Compatible

Geographic Location: United States

Announces two data backup products from Digital Storage Systems of Longmont, CO (800, 303): the ARC 6500 (\$595), a tape controller card, requiring a full -length 8-bit slot, which automatically performs an incremental backup of data each time the computer writes to disk,

.and supports usual same retrieve, and catalogue functions; and the ARC 7000 (\$995), an internal tape subsystem which performs the same functions as the ARC6500. Both products are equipped with NonStop software. Contains one photo. (djd)

Descriptors: Backup; Expansion Board; Tape Drive Identifiers: ARC 6500; ARC 7000; Digital Storage Systems

6/5/8 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01730213 ORDER NO: AADAA-19937278

Dual-reference-beam holographic particle image velocimetry

Author: Sholes, Kevin R.

Degree: Ph.D. Year: 1999

Corporate Source/Institution: The University of Wisconsin - Madison (

0262)

Supervisor: Patrick V. Farrell

Source: VOLUME 61/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 497. 132 PAGES

Descriptors: ENGINEERING, MECHANICAL; PHYSICS, OPTICS

Descriptor Codes: 0548; 0752

A new holographic particle image velocimetry system (HPIV) is proposed for measuring internal combustion engine in-cylinder turbulence. The nature of in-cylinder turbulence requires a full -field measurement device capable of 3-D resolution with no directional preference and without reliance on an assumed flow direction. The proposed system achieves these requirements by recording two holograms with perpendicular views. Each is a dual-reference-beam hologram recording two independent images of the particle-seeded flow field with a specified separation time between recordings . A fully automated interrogation system determines the mean displacements of local groups of particles throughout the recorded volume with a spatial resolution of 1 mm in each direction. Interrogation of each hologram yields the two components of velocity transverse to the hologram optical axis. The data from both holograms are combined to obtain three vector components at each location, with one component measured redundantly . Particular attention to data validation during the interrogation procedures eliminates the need for post-processing to eliminate erroneous vectors. A thorough analysis is presented of the sensitivity of HPIV to optical misalignment. The analysis concludes that dual-reference-beam systems are particularly vulnerable to both misalignments of the reconstruction beams and hologram repositioning accuracy. Recording a reference object for later image registration is necessary to recover system accuracy. Results are presented for turbulence measurement in a square tank.

# 6/5/9 (Item 2 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01596884 ORDER NO: AAD98-00699

THE FEASIBILITY OF ESTABLISHING A SECONDARY MORTGAGE MARKET TO IMPROVE THE LIQUIDITY AND AVAILABILITY OF HOUSING FINANCE FUNDS IN TAIWAN (CHINA)

Author: CHANG, GUANGDI

Degree: PH.D. Year: 1997

Corporate Source/Institution: TEXAS A&M UNIVERSITY (0803)

Chair: ARTHUR L. SULLIVAN

Source: VOLUME 58/07-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2775. 224 PAGES

Descriptors: ECONOMICS, FINANCE; URBAN AND REGIONAL PLANNING; BUSINESS

ADMINISTRATION, BANKING

Descriptor Codes: 0508; 0999; 0770

The purpose of this search is to investigate the fibility of establishing a secondary ortgage market in Taiwan to improve the liquidity and availability of housing finance funds. The government of Taiwan estimated that some 820,000 flats that builders had sold to investors stood empty in 1995. The problem of the oversupplied housing has made the three markets of savings deposits, mortgages, and housing to interact simultaneously.

A three-market, six-equation simulation model is derived from the related literature and Taiwan's socio-economic, financial, and housing context. An independent policy variable (IPV) is designed to measure the impacts of the government holdings of **secondary** mortgages. The main source of **data** for this research is quarterly data for the period 1985 to 1994 from the reports published by Taiwan's government and quasi-government agencies.

A single-equation multiple regression analysis is first used to test the significance of variables. A simulation analysis is then utilized to test the research hypotheses and the effects of the independent policy variable on the three markets. Results of the analysis indicate that the ascending government holdings of secondary mortgages produce more significant results than do the constant and descending government holding cases. The experiment of the ascending government holdings is 2 percent increment of the government holdings of presumed secondary mortgages for every quarter until the maximum of 50 percent is reached and maintained for the rest of the time. The three markets respond to the significance of the ascending government holdings with more passbook savings, more mortgage flow, lower passbook savings rate, and lower mortgage rate.

The findings of this research have demonstrated that the ascending government holdings will make purchasing houses more affordable to potential homebuyers in the oversupplied housing market and make the housing finance delivery system more competitive and effective. It is concluded that establishing a secondary mortgage market will benefit the participants in the three markets and improve the availability and liquidity of housing finance funds. Therefore, it is recommended that a secondary mortgage market be established and the ascending government holdings be arranged by a fully responsible government agency.

## 6/5/10 (Item 3 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online

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0965898 ORDER NO: AAD87-22395

A COMPARATIVE ANALYSIS OF CONSUMER DEMAND FOR MACADAMIA NUTS IN HONOLULU AND LOS ANGELES (HAWAII; CALIFORNIA)

Author: SURONO, SULASTRI SUMARNO

Degree: PH.D Year: 1987

Corporate Source/Institution: UNIVERSITY OF HAWAII (0085)

Source: VOLUME 48/07-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1844. 138 PAGES

Descriptors: ECONOMICS, AGRICULTURAL

Descriptor Codes: 0503

This study addresses the comparative demand for macadamia nuts in Los Angeles and Honolulu and the utilization of these relationships to estimate the Los Angeles market potential for the product. The need for assessing markets outside of Hawaii is crucial in face of rapidly expanding Hawaii production and near saturation of the Honolulu market. Los Angeles is the major market for macadamia nuts on the mainland and as such it is a suitable place to conduct an indepth analysis of consumer demand for the product.

Demand determinants for macadamia nuts in Honolulu (developed market) and Los Angeles (lesser developed market) are estimated through regression analysis from random sample household surveys of 1509 respondents conducted in each of the two cities. Economic as well as non-economic variables are included in the specified model. Economic variables considered were per capita income, own price and price of macadamia nuts in relation to other nuts. The non-economic determinants were age, education and ethnic

background of the primary hopper. Age and ethnic bakcground and price of macadamia nuts in relation to other nuts were found to be atistically insignificant and were dropped from the model. The analysis utilizes per capita purchases of macadamia nuts as the dependent variable, with separate regressions of the purchases for home consumption and for gifts.

The study attempts to refine the methodology for estimating market potentials for new food products in partially developed markets through their demand relationships to developed markets as obtained from household surveys. Estimation of the Los Angeles market potential for macadamia nuts incorporates the ratio of certain estimated parameters in Honolulu and Los Angeles as potential demand determinants. The estimated parameters from the regression combined with information from the survey and **secondary data** constitute the elements of the specified formula. Market prediction for Los Angeles estimates that potential sales of macadamia nuts would have amounted to 0.18 pound per capita in 1985 if the market had been fully developed under **full** distribution at that **time**. The esimated **market** potential is 7.2 greater than estimated actual sales of 0.025 pound per capita in 1985. This suggests an excellent opportunity for expanding sales of the product in Los Angeles through further market development.

6/5/11 (Item 4 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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878577 ORDER NO: AAD85-08253

AN EVALUATION OF THE INSTRUCTIONAL EFFECTIVENESS OF PART-TIME COMMUNITY COLLEGE DEVELOPMENTAL WRITING FACULTY (CALIFORNIA, ACHIEVEMENT, PERSISTENCE)

Author: BOGGS, GEORGE ROBERT

Degree: PH.D. Year: 1984

Corporate Source/Institution: THE UNIVERSITY OF TEXAS AT AUSTIN (0227)

Source: VOLUME 46/02-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 335. 190 PAGES

Descriptors: EDUCATION, COMMUNITY COLLEGE

Descriptor Codes: 0275

The increased utilization of part-time faculty in American community colleges has resulted in serious questions about the quality of instruction delivered. The purpose of this study was to address these concerns by examining the comparative effectiveness of part- and **full -time** developmental **writing** faculty at a comprehensive, public community college in California. Measures of effectiveness were successful completion of students, and student persistence to course completion and grade achievement in a subsequent freshman composition course.

Data were collected to form two data files. The primary file contains information on 3497 cases of students who enrolled in freshman composition at Butte College from Winter quarter 1979 through Fall quarter 1983. This file contains information on student grade achievement and persistence to course completion, as well as the part- or **full** -time status of the instructors who taught freshman composition and the previous developmental writing class (if taken). In addition, the primary data file includes information on other factors which were identified as potentially influencing student persistence and achievement.

The secondary data file is comprised of 191 cases of developmental writing classes which enrolled 3955 students from the Fall quarter of 1975 through Summer Session 1983. Schedule, instructor, and grade assignment data were collected, recorded, and analyzed. Despite evidence provided in the literature that institutional practices with regard to part-time instructors could, and probably should, be improved, part-times in this study were found to be at least as effective as their full -time counterparts. Not only were part- and full -time developmental writing instructors equally effective in terms of successful completion of their students, but their students also went on to achieve about equal grades in the subsequent composition class. In fact, part-timers were slightly, but not significantly, more effective than full -timers in terms of persistence of their students in a subsequent freshman

composition class.

In a related firming, part-time freshman composition students in this study showed significantly higher grade achievement and persistence, as well as fewer instances of course repetition, if they took the course from a part-time rather than a full -time instructor.

6/3,K/1 (Item 1 from lile: 16)
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05927714 Supplier Number: 53167684 (USE FORMAT 7 FOR FULLTEXT)
Storage: Western Digital Announces One of Industry's First Ultra ATA/66
Hard Drives, the WD Caviar 13.0 GB, With Leading Time-to-Market 4.3 GB
Per Platter Areal Density Outperforms competitive products by 25 to 35
percent. (Product Announcement)

EDGE: Work-Group Computing Report, pNA

Nov 2, 1998

Language: English Record Type: Fulltext

Article Type: Product Announcement Document Type: Newsletter; Trade

Word Count: 710

(USE FORMAT 7 FOR FULLTEXT) TEXT:

...is \$339. The new hard drive carries a three-year limited warranty. "With the dramatic increase in areal density growth in the past several years, time -to-market and volume-to-market execution has become mandatory for all drive makers," said John Monroe, chief analyst for rigid disk drives at Dataquest. "In spite...

...user of potential hard drive failure when enabled. The Ultra ATA/66 interface enhances data integrity through improved timing margins and the use of Cyclical **Redundancy** Check (CRC), a **data** protection system that helps assure the integrity of transferred data. The interface allows host computers to send and retrieve faster, removing bottlenecks associated with data...

...to break the 8.4 GB hard drive limitation on some traditional system BIOSs. The use of EZ-Drive, version 9.09W, will support the **full** capacity of drives greater than 8.4 GB by overcoming operating systems and system BIOS limitations, while offering the end users ease-of-installation and the...

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02959024 Supplier Number: 44005498 (USE FORMAT 7 FOR FULLTEXT)

NETWORK BACKUP VARbusiness, p140 August, 1993

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 1441

the goal is to get the network up and running quickly.

There are a number of variations of the incremental/full backup combination. A differential backup each day records all the files that have been changed since the last full backup. The differential grows in size daily, but a restoration will involve the last full backup and the last differential only. An adjusted full backup limits the number of times an unchanged file is copied. This reduces the time spent doing full backups.

The one **area** that has matured to the point where there is some structure are the devices used for storage. There are at least six choices: floppy disks...

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02408079 SUPPLIER NUMBER: 62652933 (USE FORMAT 7 OF Special Report: Inside Willows Me Beta 3. (News Briefs) FOR FULL TEXT)

Finnie, Scot; Methvin, Dave

WinMag.com, NA

May 4, 2000

LANGUAGE: English RECORD TYPE: Fulltext WORD COUNT: 7234 LINE COUNT: 00539

#### TEXT:

...200MB when SR is turned on, it will temporarily self-disable until free space climbs back above 200MB. You can change the amount of disk space used for SR, or manually enable/disable the feature on the Start > Settings > Control Panel > System > Performance > File System dialog. Nearby on the "Troubleshooting" tab, you...file reappeared in the folder. When I checked SFPLOG.TXT, it indicated that SFP had replaced the file. Impressive. I did notice, however, that the replacement file had a modification date of the current date, instead of the original file date. That's either a bug or a feature, depending on how...own movie. Movie Maker's best features don't immediately meet the eye. Microsoft is using its streaming video format, .ASF, which it says can record nearly 24hours of audio and video in 1GB of hard disk space. That's at Movie Maker's "Medium" recording quality. You'll definitely notice some loss...

6/3, K/4(Item 2 from file: 275) DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2001 The Gale Group. All rts. reserv.

01531117 SUPPLIER NUMBER: 12561455 (USE FORMAT 7 OR 9 FOR FULL TEXT) The network name feedlot: Net Worth. (Domain Name Systems directory to computer networks) (Tutorial) (Column)

Baker, Steven

UNIX Review, v10, n9, p13(8)

Sept, 1992

DOCUMENT TYPE: Column ISSN: 0742-3136 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

3095 LINE COUNT: 00241 WORD COUNT:

9,999 after the decimal point. A reasonable format incorporating the month, day, and year is:

yymm.dd[00-99]

The next, three SOA fields indicate the time in seconds a secondary name server should take to check with a primaryname server to refresh (check for an update), retry after a refresh failure, and the upper limit to expire data if a refresh can't be processed. The final minimum field is the default time in seconds to be used for the ...

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01549298 SUPPLIER NUMBER: 13229254 (USE FORMAT 7 OR 9 FOR FULL TEXT) Bulletin boards. (computer BBSs)

Computer Shopper, v12, n12, p765(44)

Dec, 1992

ISSN: 0886-0556 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 73106 LINE COUNT: 05573

... a MS-DOS 80486; 1,000Mb running PCBoard 14.5a/E6 with Anchor at up to 2,400 bps. Established 11/90; no fee. Free **full** access on first call! Over 1Gb of the latest software.

California \* 916

Berry Creek 589-4929. Time Bender-Long BBS with sysop Terral Jamison. 1...Established 04/91; fee of \$10 annually. NW Florida's premier BBS. Many message bases including adult areas. Shareware Distribution Net.

Inverness 637-3713. Prime **Time** with sysop **Mark** Beaubien. 1 line operating on a MS-DOS 80286; 142Mb running Searchlight 2.15c with US Robotics at up to 9,600 bps. Established 07...

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EDGE: Work-Group Computing Report, pNA

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02959024 Supplier Number: 44005498 (USE FORMAT 7 FOR FULLTEXT)

NETWORK BACKUP VARbusiness, p140

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.02408079 02408079 SUPPLIER NUMBER: 62652933 (USE FORMAT 7 OF FOR FULL TEXT)
Special Report: Inside Willows Me Beta 3. (News Briefs)

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LANGUAGE: English RECORD TYPE: Fulltext WORD COUNT: 7234 LINE COUNT: 00539

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WORD COUNT: 3095 LINE COUNT: 00241

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01549298 SUPPLIER NUMBER: 13229254 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Bulletin boards. (computer BBSs)

Computer Shopper, v12, n12, p765(44)

Dec, 1992

ISSN: 0886-0556 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 73106 LINE COUNT: 05573

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California \* 916

Berry Creek 589-4929. Time Bender-Long BBS with sysop Terral Jamison. 1...Established 04/91; fee of \$10 annually. NW Florida's premier BBS. Many message bases including adult areas. Shareware Distribution Net.

Inverness 637-3713. Prime **Time** with sysop **Mark** Beaubien. 1 line operating on a MS-DOS 80286; 142Mb running Searchlight 2.15c with US Robotics at up to 9,600 bps. Established 07...

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       9:Business & Industry(R) Jul/1994-2001/Oct 16
         (c) 2001 Resp. DB Svcs.
     75:TGG Management Contents(R) 86-2001/Oct W1
         (c) 2001 The Gale Group
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 810: Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 612: Japan Economic Newswire (TM) 1984-2001/Oct 15
         (c) 2001 Kyodo News
File 635: Business Dateline (R) 1985-2001/Oct 16
         (c) 2001 ProQuest Info&Learning
File 484: Periodical Abs Plustext 1986-2001/Sep W3
         (c) 2001 ProQuest
File 647:CMP Computer Fulltext 1988-2001/Oct W1
         (c) 2001 CMP Media, LLC
File 623:BUSINESS WEEK 1985-2001/OCT W1
         (c) 2001 THE MCGRAW-HILL COMPANIES INC
      20:World Reporter 1997-2001/Oct 17
         (c) 2001 The Dialog Corporation
Set
        Items
                Description
S1
        67115
                 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUPLICAT? OR REPLACEM-
             ENT? OR SECONDARY) (5N) (SERVER? OR STORAGE OR DATA OR FILE OR -
             FILES OR RAID? ? OR DISK(2N) ARRAY?)
S2
                TIMESTAMP? OR (TIME(NOT 2N) REAL OR DAY OR DATE OR HOUR? OR
             MINUTE?) (2N) (STAMP? OR RECORD? OR NOTE? OR NOTING OR MARK??? -
             OR WRITE? OR WRITING OR WRITTEN OR REGISTER? OR INDICAT?)
                 (REACH? OR LIMIT? OR ACHIEV? OR FULL OR FILL??? OR (USED OR
S3
              USING) () UP) (5N) (CAPACITY OR MAXIM? OR UPPER(1W) LIMIT? ?)
S4
       211869
                 (SPACE? ? OR AREA? ?) (3N) (FULL OR USED OR FILLED) OR S3
S5
                S1(S)S2(S)S4
S6
                RD (unique items)
S7
                ARCHIV? (3N) (SERVER? OR STORAGE OR DATA OR FILE OR FILES OR
             RAID? ? OR DISK(2N)ARRAY?)
S8
            1
                S7(S)S2(S)S4
S9
            0
                S8 NOT S6
```

6/3,K/1 (Item 1 from lile: 635)
DIALOG(R)File 635:Busine Dateline(R)
(c) 2001 ProQuest Info&Learning. All rts. reserv.

0682573 96-39791

Tandberg Data announces TDS 1000 Series library systems based on its new 13 GB TDC 6100 QIC tape drive

Vu, Theresa

Business Wire (San Francisco, CA, US) pl

PUBL DATE: 960315 WORD COUNT: 698

DATELINE: Simi Valley, CA, US, Pacific

TEXT:

...TDC 6100 data cartridge drive. The 13 GB native capacity drive uses multichannel linear recording techniques (MLR) and a 144-track thin film head to achieve a capacity increase over the company's prior DC6000 products by a factor of more than four to one.

The drive has been in development for more...

...Oslo, Norway, facility. "We have really been 'pushing the envelope' with this new technology for the 13 GB drive," Severa said. "We probably underestimated the **time** to **market** with regard to head technology, mechanics and circuitry."

"When doubling, tripling and even increasing drive capacities by more than four times as we have done...

...up to 180 megabytes-per-minute transfer rates and uses a newly developed 144-track thin-film head design and 13 GB tape media to **achieve** an uncompressed **capacity** of 13 GB."

"We will be shipping library systems for evaluation to selected OEM customers in May with anticipated first production-level units to our...

...a pioneer in streaming tape technology and is the leading worldwide supplier of high-speed, high-capacity QIC tape drives and related products for computer **backup**, archival **storage** and software distribution.

Major OEM customers include IBM, Sun Microsystems, Digital Equipment Corp., H.P.'s Colorado Memory Systems division and AT&T. Tandberg Data...

6/3,K/2 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2001 CMP Media, LLC. All rts. reserv.

00545823 CMP ACCESSION NUMBER: VAR19930801S4180

NETWORK BACKUP - Playing Catch-Up to the Growth in LANs (Market Report)

Cassimir Medford

backups.

VARBUSINESS, 1993, n 911 , 140

PUBLICATION DATE: 930801

JOURNAL CODE: VAR LANGUAGE: English

RECORD TYPE: Fulltext SECTION HEADING: Business WORD COUNT: 1448

the goal is to get the network up and running quickly.

There are a number of variations of the incremental/full backup combination. A differential backup each day records all the files that have been changed since the last full backup. The differential grows in size daily, but a restoration will involve the last full backup and the last differential only. An adjusted full backup limits the number of times an unchanged file is copied. This reduces the time spent doing full

The one area that has matured to the point where there is some

structure are the device sed for storage. There are at st six choices: floppy disks...?

500	T C CIND	bescription							
S1		(LONG()TERM OR PERMANENT OR ARCHIV?)(10N)(STORAGE? OR MEMO- OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY?(2W)(DISK? ? OR							
		ISC? ?)							
S2	18460								
	) U	P OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR							
	SECONDARY)								
S3		(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR							
	CONTROLLED OR MANAG? OR INTEGRAT?) (15N) (PROCESSOR? OR CPU OR								
CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N)-									
	,	ATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))							
S4		(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST???							
	OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?)(5N)(TIME? OR								
		UR?? OR MINUTE? ? OR INTERVAL?)							
S5		CAPACIT? OR LIMIT? OR MAXIMUM?							
S6		(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUS-							
EL? OR AUTOMATION()SYSTEM?)									
s7	138628	ROBOT? OR CYBERNET? OR AUTOMATE?							
S8	0	S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7							
S9	0	(S1 OR S2) AND S3 AND S4 AND S5 AND (S6 OR LIBRAR??? OR S7)							
S10	7	(S1 OR S2) AND S3 AND S4 AND S5							
s11	0	(MASS()STORAGE OR S6) AND S3 AND S4 AND S5							
S12	0	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME AND (S6							
		LIBRAR???)							
S13	54	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME							
S14	0	S13 AND (S6 OR LIBRAR? OR S7)							
S15	4	(MASS()STORAGE OR S1 OR S2) AND S3 AND S5 AND TIME(5N)SIGN-							
		????							
S16	3								
S17	0	S1 AND S2 AND S3 AND S4							
S18	0	(S1 AND S2) AND S3 AND S4							

(Item 1 from le: 350) DIALOG(R) File 350: Derwent WPIX (c) 2001 Derwent Info Ltd. All rts. reserv. 013133980 \*\*Image available\*\* WPI Acc No: 2000-305851/200027 XRPX Acc No: N00-228693 Information storage system having function of copying or compressing and storing updated data as secondary data among one or more control units has control module for comparing difference between latest write time and oldest write time Patent Assignee: HITACHI LTD (HITA ); HITACHI SOFTWARE ENG CO LTD (HISF ) Inventor: KIMURA T; KOIDE T; NAGASAWA T; SAITSU Y Number of Countries: 026 Number of Patents: 002 Patent Family: Patent No Kind Date Applicat No Kind Date Week EP 997817 A2 20000503 EP 99121269 Α 19991025 200027 JP 2000137638 A 20000516 JP 98324543 Α 19981029 200032 Priority Applications (No Type Date): JP 98324543 A 19981029 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes EP 997817 A2 E 13 G06F-011/14 Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI JP 2000137638 A 14 G06F-012/00 Abstract (Basic): EP 997817 A2 NOVELTY - A master control unit (105) receives a data write request from an information processor (100). A storing unit (110) connected to the master control unit (105). The control unit (105) has a control module (401) for comparing the difference between the latest write time (337) and the oldest write time (336) in a group of write data which has not been transferred to a remote control unit (115) with a preset allowance time (335). DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for: (a) a data transfer method of an information storage system USE - In an information storage system having the function of copying or compressing and storing updated data as secondary among one or more control units. ADVANTAGE - Assures not only consistency of data but also the limit of the assurance from various points of view, and to assure significance of the consistency of data by assuring and maintaining the data consistency within the range expected by the user. DESCRIPTION OF DRAWING(S) - The drawing shows a process flow in a first embodiment of the present invention. information processor (100) master control unit (105) storing unit (110) remote control unit (115) preset allowance time (335) oldest write time (336) latest write time (337) control module (401) pp; 13 DwgNo 4/7 Title Terms: INFORMATION; STORAGE; SYSTEM; FUNCTION; COPY; COMPRESS; STORAGE; UPDATE; DATA; SECONDARY; DATA; ONE; MORE; CONTROL; UNIT; CONTROL ; MODULE; COMPARE; DIFFER; LATE; WRITING; TIME; WRITING; TIME Derwent Class: T01; U21 International Patent Class (Main): G06F-011/14; G06F-012/00 File Segment: EPI

10/5/2 (Item 2 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2001 Derwent Info Ltd. All rts. reserv.

\*\*Image avai WPI Acc No: 1992-192610/199224

XRPX Acc No: N92-145442

Data storage in memory for document production - has extensive operator input error checking and data verification with display of input data

Patent Assignee: NORTON HOLDINGS LTD (NORT-N)

Inventor: HENEY J

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date BE 1003630 A6 19920505 BE 911161 Α 19911219 199224 GB 2262639 Α 19930623 GB 9124545 Α 19911119 199325 GB 2262639 В 19941207 GB 9124545 Α 19911119 199501

Priority Applications (No Type Date): BE 911161 A 19911219; GB 9124545 A 19911119

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

BE 1003630 А6 20 G06F

GB 2262639 24 G06F-015/20 Α GB 2262639 В 4 G06F-015/20

Abstract (Basic): BE 1003630 A

The system records data and produces documents whilst assuring data preservation. It has a control unit with operator interface, a non-remanant memory , a text processor , a permanent memory input circuit, containing a relational data base with predetermined data for the production of documents and a primary data base having a fixed storage capacity of at least 2 kilobytes.

The system includes the various stages for data input error checking, recording and transmission of data, production of printing instructions, display at operator input of incorrect data with facility for correction.

ADVANTAGE - Reduces time spent on recording data for document production whilst ensuring correct data input and data preservation. Dwa.1/2

Title Terms: DATA; STORAGE; MEMORY; DOCUMENT; PRODUCE; EXTEND; OPERATE; INPUT; ERROR; CHECK; DATA; VERIFICATION; DISPLAY; INPUT; DATA

Derwent Class: T01

International Patent Class (Main): G06F-013/00; G06F-015/20

File Segment: EPI

# (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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008308184 \*\*Image available\*\* WPI Acc No: 1990-195185/199026

XRPX Acc No: N90-151868

Fault diagnosis in vehicle electrical and electronic circuits - uses processor operating under specific program to control recording of signal data in permanent memory for later display
Patent Assignee: ACTIA SA (ACTI-N)

Inventor: BETHENCOURT G; FONTE J; BETHENCOUR G; FONTE J C

Number of Countries: 013 Number of Patents: 006

Patent Family.

ratent ramity:										
Patent No	Kind	Date	Applicat No	Kind	Date	Week				
EP 374998	Α	19900627	EP 89203045	Α	19891130	199026	В			
FR 2641085	Α	19900629				199033				
US 5107428	Α	19920421	US 89456091	Α	19891222	199219				
EP 374998	B1	19930825	EP 89203045	Α	19891130	199334				
DE 68908682	E	19930930	DE 608682	Α	19891130	199340				
			EP 89203045	Α	19891130					
ES 2045395	Т3	19940116	EP 89203045	Α	19891130	199407				

Priority Applications (No Pype Date): FR 8817368 A 198812 Cited Patents: EP 141050; P 225971; EP 231607; EP 231743 P 39122; EP 5436; GB 2081909; WO 8802122

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 374998

Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE

US 5107428 Α 14

B1 F. 28 G07C-005/08 EP 374998

Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE

G07C-005/08 Based on patent EP 374998 DE 68908682 F. ES 2045395 Т3 G07C-005/08 Based on patent EP 374998

Abstract (Basic): EP 374998 A

The diagnosis unit has a connection (2) which allows the monitoring of the states of the signals in the system to be tested. The unit input has a wave shaping interface (15) with multiple calibration modules set up in parallel. A multi-function processor (21) is connected to the wave-shaping interface (15) and has a battery-backed memory in which it stores, in real time, detected fault signals. The processor memory (25) stores multiple diagnostic programmes each corresponding a particular vehicle.

A user interface (28) is provided, having a display which shows the contents of the battery backed memory. Manual selection is provided to determine which program will be used and which data displayed.

ADVANTAGE - Low cost vehicle-mounted diagnostic circuit which keeps records of electrical signals while vehicle is on road, providing data taken under normal operating conditions for more accurate maintenance and to facilitate tracking of intermittent faults. (23pp Dwg.No.3/10)

Title Terms: FAULT; DIAGNOSE; VEHICLE; ELECTRIC; ELECTRONIC; CIRCUIT; PROCESSOR; OPERATE; SPECIFIC; PROGRAM; CONTROL; RECORD; SIGNAL; DATA; PERMANENT; MEMORY; LATE; DISPLAY

Derwent Class: S01; T05; X22

International Patent Class (Main): G07C-005/08

International Patent Class (Additional): G01M-015/00; G01R-031/00

File Segment: EPI

## (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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007653757

WPI Acc No: 1988-287689/198841

XRPX Acc No: N88-218302

Real-time accumulator and processor for watt-hour meter - updates internal real-time clock with data from back- up battery-powered clock immediately after outage termination

Patent Assignee: SANGAMO WESTON LTD (SAEL ); SCHLUMBERGER IND INC (SLMB )

Inventor: CVOPPOLE R; RIGGS R L; STREET T G; COPPOLA R

Number of Countries: 012 Number of Patents: 004

Patent Family:

Patent No Kind Date Applicat No Kind Date Week EP 286544 A 19881012 EP 88400861 A 19880411 198841 B BR 8801658 Α 19881116 198851 CA 1293995 C 19920107 199209 US 5216357 Α 19930601 US 8736633 199323 Α 19870410 US 89358494 Α 19890530 US 91641385 Α 19910114

Priority Applications (No Type Date): US 8736633 A 19870410; US 89358494 A 19890530; US 91641385 A 19910114

Cited Patents: A3...8929; GB 2017937; GB 2069153; GB 2136613; No-SR.Pub; US 4197582; US 4466074

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 286544 A E 12 Abstract (Basic): EP 286544 A

A microprocessor synchronised by a crystal oscillator includes an internal real-time clock and ROM for control program storage. When power outage is detected, energy consumption and associated real-time data are transferred from the internal RAM to an external nonvolatile NMOS or CMOS RAM.

The clock is reset to accumulate real time while an external clock is powered from the back-up battery. If this has less than a predetermined residual **capacity**, real time elapsing during the outage is not accumulated and an alarm is displayed.

USE/ADVANTAGE - Solid-state time -of-use electricity meter register having back-up battery. Loss of power and time-of-use data during outages is minimised by updating immediately after restoration of power.

Title Terms: REAL-TIME; ACCUMULATOR; PROCESSOR; WATT; HOUR; METER; UPDATE; INTERNAL; REAL-TIME; CLOCK; DATA; BACK; UP; BATTERY; POWER; CLOCK; IMMEDIATE; AFTER; OUTAGE; TERMINATE

Derwent Class: S01

International Patent Class (Main): G01R-022/00

International Patent Class (Additional): G01R-013/32; G01R-021/00;

G06F-012/16 File Segment: EPI

10/5/5 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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001505778

WPI Acc No: 1976-G8705X/197631

Digital computer microprogramme control circuit - is simplified to increase operational speed, circuit economy and reliability

Patent Assignee: OVSEPYAN G E (OVSE-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week SU 482743 A 19751209 197631 B

Priority Applications (No Type Date): SU 1164764 A 19670610

Abstract (Basic): SU 482743 A

Circuit disclosed in Spec. No. 224161 is rearranged to reduce communication lines between registers, thus increasing operational speed and circuit economy. Circuit contains long -term memory storage (1), registers (2-4), decoder (5), clock generator (6), OR logic (7-10), AND logic (11), gates (12-17) and invertors (18-17) and invertors (18-21). Control pulses are directed to various units through gates (12). All operational cycle is controlled by clock pulse generator (15). Instead of storing real address micro-processor store code which allows the following micro-command address formation without the need of register (4) re-set to zero. Apart from dispensing with re-set line, this method also avoids an address parity check. Address code correction is obtained by re-setting the **register** (4) trigger each time micro-command contains elementary operations instruction. Micro-command address is thus formed statistically by invertor circuits (18-21) with maximum circuit simplification.

Title Terms: DIGITAL; COMPUTER; CONTROL; CIRCUIT; SIMPLIFY; INCREASE; OPERATE; SPEED; CIRCUIT; ECONOMY; RELIABILITY

Derwent Class: T01

International Patent Class (Additional): G06F-009/16

File Segment: EPI

10/5/6 (Item 1 from le: 347)

DIALOG(R) File 347: JAPIO

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05491858 \*\*Image available\*\*

RECORDING METHOD AND INFORMATION-RECORD REPRODUCER

PUB. NO.: 09-106658 [JP 9106658 A] PUBLISHED: April 22, 1997 (19970422)

INVENTOR(s): TASAKA SHUICHI HARADA WATARU

UMEZAKI KIYOSHI

APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company

or Corporation), JP (Japan)
APPL. NO.: 07-259783 [JP 95259783]
FILED: 0ctober 06, 1995 (19951006)

INTL CLASS: [6] G11B-027/00; G11B-011/10; G11B-019/02; G11B-027/10

JAPIO CLASS: 42.5 (ELECTRONICS -- Equipment)

JAPIO KEYWORD: R138 (APPLIED ELECTRONICS -- Vertical Magnetic &

Photomagnetic Recording)

#### ABSTRACT

PROBLEM TO BE SOLVED: To decrease the memory capacity required for replacement of recording medium by once storing control information in a memory means and recording the information to the recording medium after the completion of data recording when the data are recorded over a plurality of the recording mediums.

SOLUTION: An input information signal 17 is stored into a vibration resisting first memory 11 as a data buffer and stored in a magneto-optical disk through a signal processing part. The control information of the recording data is stored in a second memory 12. When the recording data covers a plurality of disks, the disk is replaced with the next disk with a changer stocker 2 after the recording on the disk. The recording data during the replacement are stored in the memory 11. Recording is restarted into the mounted disk. At the time point when the data recording is completed, the control information is written to each disk from the memory 12. Thus, the capacity of the memory storing the data required for the replacement of the disks can be decreased, and the simplification of the reproducer is achieved.

10/5/7 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

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02842753 \*\*Image available\*\*

SYSTEM FOR MAINTAINING DATA IN DATA BASE

PUB. NO.: 01-140353 [JP 1140353 A] PUBLISHED: June 01, 1989 (19890601)

INVENTOR(s): MINODA MASAYOSHI
KAWAI YOSHITERU
KUSUYAMA ITARU
SAITO TSUTOMU

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP

(Japan)

HITACHI COMPUT ENG CORP LTD [472484] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 62-299334 [JP 87299334] FILED: November 27, 1987 (19871127) INTL CLASS: [4] G06F-012/00; G06F-007/22

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.1

(INFORMATION PROCESSING -- Arithmetic Sequence Units)

JOURNAL: Section: P, Section No. 926, Vol. 13, No. 391, Pg. 146,

August 30, 1989 (19890830)

PURPOSE: To acquire span data for the recovery of a far by the minimum number of recording media and to perform management for e generating of data by outputting backup only when the data is updated.

CONSTITUTION: An update flag to show that the data is generated newly or is updated is provided. And only the data on which the flag an attached is outputted to a retention file 8 after updating, and all data names are outputted to a data name managing list at the time of outputting to the retention file 8, and at the time of recovering a data base, only the data whose data name is registered in the data name managing list 9 is recovered. In such a way, it is possible to acquire the spare data for the recovery of the fault by the minimum capacity of recording media, and to perform the management for the data extending over plural generations.

16/5/1 (Item 1 from le: 350)
DIALOG(R) File 350: Derwent WPIX
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011159131 \*\*Image available\*\* WPI Acc No: 1997-137056/199713

XRPX Acc No: N97-113154

Remote login method of client to server in computer system - has control processor in server servicing remote clients requests with command interpreters, processors through control and data input-output connections

Patent Assignee: NEC CORP (NIDE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 9016412 A 19970117 JP 95160797 A 19950627 199713 B

Priority Applications (No Type Date): JP 95160797 A 19950627

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 9016412 A 7 G06F-009/46

Abstract (Basic): JP 9016412 A

The method involves transmission of control signals from remote client system (100) to server system (110) on communication control connections (120). At the server end, the control processor (111) is linked to the remote client through the communication control connections. The server system is equipped with command interpreters (113,114), command processors (115,116) and process management table (112). The control signal for command start request from the remote client system is received and command interpreters are started with data regarding the command interpreters involved stored in process management table. Then, each command interpreter is linked to the remote client system through data input-output connections (130,140).

The command start request signal is received through data inputoutput connections for starting the command processors. The response
data resulting from the command process is sent to the concerned
originating remote client system. The process management table
regulates the operation of command interpreters. When a number of
remote client systems transmit command start request signal at the
same time, all the signals are handled by one control processor
with its process management table and some command interpreters which
are started.

ADVANTAGE - Simplifies system organization by use of only one control connection for remote client. Dispenses with need for virtual device between control processor and command interpreter. Minimizes requirements of memory capacity consequent to reduction of other resources. Frees memory for alternate server applications.

Title Terms: REMOTE; METHOD; CLIENT; SERVE; COMPUTER; SYSTEM; CONTROL; PROCESSOR; SERVE; SERVICE; REMOTE; CLIENT; REQUEST; COMMAND; PROCESSOR; THROUGH; CONTROL; DATA; INPUT; OUTPUT; CONNECT

Derwent Class: T01

International Patent Class (Main): G06F-009/46

International Patent Class (Additional): G06F-013/00

File Segment: EPI

# 16/5/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

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010284619 \*\*Image available\*\*
WPI Acc No: 1995-185878/199524
XRPX Acc No: N95-145527

System interface fault isolator test set for interfaces found in aircraft

# - uses time domain refl ometry test techniques to isol faults from one end of cable Patent Assignee: GRUMMAN AEROSPACE CORP (GRUA ); NORTHROP GRUMMAN CORP (NOTH ) Inventor: ROLL-MECAK D T; TEICH S Number of Countries: 021 Number of Patents: 007

В

rat	cent ramming.	•							
Pat	ent No	Kind	Date	App	plicat No	Kind	Date	Week	
WO	9512820	A1	19950511	WO	94US10337	Α	19940916	199524	3
US	5479610	Α	19951226	US	93144318	Α	19931101	199606	
TW	269023	Α	19960121	TW	94110053	Α	19941101	199615	
ΕP	727048	A1	19960821	ΕP	94930428	А	19940916	199638	
				WO	94US10337	Α	19940916		
IL	111410	Α	19960804	IL	111410	Α	19941026	199646	
JP	9506448	W	19970624	WO	94US10337	Α	19940916	199735	
				JP	95513200	А	19940916		
ΕP	727048	A4	19970423	ΕP	94930428	Α	19940000	199735	

Priority Applications (No Type Date): US 93144318 A 19931101 Cited Patents: US 4541031; US 4629835; US 4739276; US 4766386; US 4786857; US 4838690; US 4970466; US 5083080; US 5185579; US 5352984; EP 148674; US 4538103; US 5083086

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9512820 A1 E 20

Designated States (National): CA JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

US 5479610 A 10

EP 727048 A1 E 20 Based on patent WO 9512820

Designated States (Regional): DE FR GB

JP 9506448 W 26 Based on patent WO 9512820

Abstract (Basic): WO 9512820 A

A system interface fault isolator has a separate maintenance control unit (2), including a mass storage device (16) for storing TDR or VSWR signatures of a variety of systems board connected to a cable or component to the tested.

VSWR data is obtained by processing the TDR data using software built into the maintenance control unit (2). The control unit is programmable to accommodate a variety of different system interfaces and bit status data can be downloaded directly to the control unit. Two adaptors (6) are also provided, one of which is connected to the control unit to analyse a multi-line digital bus, and the other one allows differential TDR measurements to be taken by the SI-FI on a MIL-STD-1553 bus.

USE/ADVANTAGE - Isolation of failures in complex system interfaces such as those found in aircraft. Provides a system interface fault isolation test set which is capable of in-situ fault isolation to a defective component in a system interface path without necessitating the removal of components.

Dwg.2/6

Title Terms: SYSTEM; INTERFACE; FAULT; ISOLATE; TEST; SET; INTERFACE; FOUND; AIRCRAFT; TIME; DOMAIN; REFLECTOMETER; TEST; TECHNIQUE; ISOLATE; FAULT; ONE; END; CABLE

Derwent Class: S01; T01; W06

International Patent Class (Main): G01R-031/28; G06F-011/00; G06F-013/00

International Patent Class (Additional): G01R-027/28; G06F-003/00;

G06F-011/22; H04L-012/40

File Segment: EPI

# 16/5/3 (Item 3 from file: 350) DIALOG(R) File 350: Derwent WPIX

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007734805 \*\*Image available\*\*

WPI Acc No: 1988-368737/ 851

Communication protocol for public service trunking system translating message protocol and format between site controller and land link and between land link and dispatch console

Patent Assignee: GENERAL ELECTRIC CO (GENE ); ERICSSON GE MOBILE COMMUNICATIONS (TELF ); GENERAL ELECTRIC CO LTD (ENGE ); ERICSSON GE MOBILE COMMUNICATIONS INC (TELF ); ERICSSON-GE MOBILE COMMUNICATIONS INC (TELF ); ERICSSON INC (TELF )

Inventor: CHILDRESS J S; HUGHES H H; GORDON R T; HATTEY D L; NAZARENKO D M;
YURMAN B; COOPER G M; DISSOSWAY M A; HALL N; SPANGLER F

Number of Countries: 006 Number of Patents: 060

Patent Family:

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	ent No	Kind	Date		olicat No	Kind	Date	Week	
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Priority Applications (No Type Date): US 8785663 A 19870814; US 8756922 A
  19870603; US 8756923 A 19870603; US 8756924 A 19870603; US 8757046 A
  19870603; US 8785490 A 19870814; US 8785491 A 19870814; US 8785572 A
  19870814; US 89365810 A 19890306; US 89442319 A 19891128; US 89449790 A
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Cited Patents: US 4422171; US 4511958; US 4549297; US 4672601; US 4672655;
  US 4672658; US 4677656; US 4694473; US 4712214; US 4712229; US 4730348
Patent Details:
Patent No
           Kind Lan Pg
                          Main IPC
                                       Filing Notes
WO 8809969
              A E 224
   Designated States (National): DK GB JP KR
JP 3019308
                     53 H04L-001/16
              В2
                                      Previous Publ. patent JP 64002435
US 4821292
              Α
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GB 2244890
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Derived from application GB 8813169

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Abstract (Basic): WO 8809969 A

The signal communication method comprises sending signals in a predetermined protocol between the site controller and a down link trunking card module over a serial data link. The digital signals are translated from one protocol to another. The signals in the second protocol are communicated between the down link trunking card module

and a switch module tote from the site, over anothe erial data link.

The second protocol signals are translated into further protocol signals. These signals are communicated between the switch trunking card module and the processor.

USE - In trunk radio repeater system.

Title Terms: COMMUNICATE; PROTOCOL; PUBLIC; SERVICE; TRUNK; SYSTEM; TRANSLATION; MESSAGE; PROTOCOL; FORMAT; SITE; CONTROL; LAND; LINK; LAND; LINK; DISPATCH; CONSOLE

Derwent Class: T01; W01; W02

International Patent Class (Main): G06F-011/10; H04B-001/38; H04B-001/60; H04B-001/74; H04B-007/00; H04B-007/14; H04B-007/15; H04B-007/24; H04J-003/26; H04L-001/16; H04L-009/00; H04M-011/00; H04Q-007/02;

H04Q-007/28
International Patent Class (Additional): G08C-025/00; G08C-025/02; H01J-007/04; H04B-001/02; H04B-001/40; H04B-003/36; H04B-007/204; H04B-007/26; H04B-017/02; H04J-003/22; H04L-011/20; H04L-012/56; H04M-003/22; H04Q-007/04; H04Q-009/02
File Segment: EPI

File 350:Derwent WPIX 19 2001/UD, UM & UP=200143 (c) 2001 Derwent Info Ltd File 347: JAPIO OCT 1976-2001/Mar(UPDATED 010705) (c) 2001 JPO & JAPIO File 344: CHINESE PATENTS ABS APR 1985-2001/Jun (c) 2001 EUROPEAN PATENT OFFICE File 348: European Patents 1978-2001/Jul W04 (c) 2001 European Patent Office File 349:PCT Fulltext 1983-2001/UB=20010719, UT=20010712 (c) 2001 WIPO/MicroPat Items Description Set O AU=(MIDGLEY C? AND WEBB J? AND CHARTIER D? AND GONSALVES C? S1 AND HANSEN T?) S2 O AU=MIDGLEY C? AND AU=(WEBB J? OR CHARTIER D? OR GONSALVES -C? OR HANSEN T?) 638 AU=(MIDGLEY C? OR WEBB J? OR CHARTIER D? OR GONSALVES C? OR s3 HANSEN T?) S40 (BACKUP OR BACK?()UP OR REDUNDAN? OR DUAL?)(5N)SERVER? AND

S3 AND LONG() TERM(3N) (MEMOR? OR STORAGE)

S3

S5

:File	348 · Furone	an Patents 1978-2001/Jul W04
T IIC	(c) 20	01 European Patent Office
File		lltext 1983-2001/UB=20010719, UT=20010712
	(c) 20	01 WIPO/MicroPat
Set		Description
S1		(LONG() TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? -
		MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY?(2W)(DI-
_		? ? OR DISC? ?)
s2	32522	(SERVER? OR DATA OR FILE OR FILES) (5N) (BACKUP? OR BACK???(-
	•	P OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR
- 0		CONDARY)
s3		(COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR
		ONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR -
		US OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N) -
C 4		ATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4		(COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST??? R INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?)(5N)(TIME? OR
		R INDICAL! OR REGISTER! OR MARK!!! OR EXAMIN!)(JN)(TIME: OR UR?? OR MINUTE? ? OR INTERVAL?)
s5		CAPACIT? OR LIMIT? OR MAXIMUM?
s 6		(TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUS-
50		? OR AUTOMATION()SYSTEM?)
s7	74320	ROBOT? OR CYBERNET? OR AUTOMATE?
\$8	0	S1(S)S2(S)S3(S)S4(S)S5(S)S6(S)S7
s 9	7	S1(S)S2(S)S3(S)S4(S)S5
S10	5	S9 NOT PATTERNS()ENVIRONMENT/TI
S11	9	S1(S)S2(S)S3(S)S4
S12	2	S11 NOT S9

(S1 OR S2)(S)S3(S)S4(S)(S6 OR LIBRAR???)

S14 NOT (SERVICE?()PATTERN? OR NETCENTRIC)/TI

0 ((S1 OR S2 OR DATA()STORAGE) AND S3 AND S4.AND (S5 OR S6 OR

S13 NOT (S9 OR S11)

S13

S14

S15 S16 19

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S7))/TI,AB

10/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2001 European Patent Office. All rts. reserv.

00722429

DATA STORAGE MANAGEMENT FOR NETWORK INTERCONNECTED PROCESSORS
DATENSPEICHERVERWALTUNG FUR IN EINEM NETZWERK ZUSAMMENGESCHALTETE
PROZESSOREN

GESTION DE MEMORISATION DE DONNEES POUR PROCESSEURS INTERCONNECTES EN RESEAU

PATENT ASSIGNEE:

KODAK LIMITED, (258581), P.O. Box 66 Station Road, Hemel Hempstead Herts, HP1 1JU, (GB), (Proprietor designated states: all)

INVENTOR:

BLICKENSTAFF, Ronald, L., 585 Locust Place, Boulder, CO 80304, (US) BRANT, Catherine, Irlam, 4784 Dorchester Circle, Boulder, CO 80301, (US) DODD, Paul, David, 4692 Palmer Court, Niwot, CO 80503, (US) KIRCHNER, Anton, H., 3115 - 3rd Street, Boulder, CO 80304, (US) MONTEZ, Jennifer, Kay, 1523 E. 131st Place, Thornton, CO 80241, (US) TREDE, Brian, Eldred, 5566 Stonewall Place, Boulder, CO 80303, (US) WINTER, Richard, Allen, 6255 Niwot Road, Longmont, CO 80503, (US) LEGAL REPRESENTATIVE:

Goodanew, Martin Eric et al (31082), MATHISEN, MACARA & CO. The Coach House 6-8 Swakeleys Road, Ickenham Uxbridge UB10 8BZ, (GB) PATENT (CC, No, Kind, Date): EP 746819 Al 961211 (Basic)

EP 746819 B1 991215

WO 9523376 950831

APPLICATION (CC, No, Date): EP 95911653 950210; WO 95US1660 950210 PRIORITY (CC, No, Date): US 201658 940225

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-012/08; G06F-003/06 NOTE:

No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS B (English) 9950 4348 (German) CLAIMS B 9950 3803 9950 CLAIMS B (French) 5378 (English) 9950 SPEC B 10199 Total word count - document A 0 Total word count - document B 23728 Total word count - documents A + B 23728

- ...SPECIFICATION storage server processor 51 serves to interface the local area network 1 with the backend data storage devices 61-65 (Figure 4) that constitute the **secondary** storage 52. The backend **data** storage devices 61-65, in combination with the file servers 41-43 comprise a hierarchical data storage system. The backend data storage devices 61-65 ...
- ...is less costly than the dedicated data storage devices 31-33 of the file servers 41-43 to provide a more cost-effective data storage capacity for the processors 21, 22. The data storage management system implements a virtual data storage space for the processors 21, 22 that are connected to the local area network 1. The virtual data storage...
- ...is connected to the network 1 and used by processors 21, 22. A second section B of the virtual memory comprises the secondary storage 52 managed by the storage server processor 51. The secondary storage 52 provides additional data storage capacity for each of the primary data storage devices 31-33, represented on Figure 1 as the virtual devices 31S-33S attached in phantom to the primary data storage devices 31-33 of the file servers 41-43. Processor 21 is thereby presented with the image of a greater capacity data storage device 31 than is connected to the file server 41. The storage server 51 interfaces to software components stored in each processor 21...

- ...to the network 1. Data files that are of lower priority are migrated via the network 1 and the storage server processor 51 to backend **data** storage media of the **secondary** storage 52. The **data file** directory resident in the file server 41 that originally contained this data file is updated with a placeholder entry in the directory to indicate that...
- ...processor 21, 22 and 42 that interfaces to a user, the storage server 50 may provide the user with a notification where necessary that a time delay may be noted in accessing the requested data file. The storage server processor 51 automatically retrieves the requested data file and transmits it to the data storage device 31 from whence it originally came. The storage server processor 51, secondary storage 52 and processor resident software modules create a virtual storage capacity for each of the file servers 41-43 in a manner that is transparent to both the processor 21, 22 and the user. Each virtual...
- ...in this system can be expanded in extent in a seamless manner to match the needs of the processors 21, 22 by using low cost mass storage devices to implement the secondary storage 52.

Network Software

Figure 2 illustrates in block diagram form the typical components of the network software, including the...

10/3,K/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext

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00802534

# ANY-TO-ANY COMPONENT COMPUTING SYSTEM SYSTEME INFORMATIQUE A COMPOSANTS TOUTE CATEGORIE

Patent Applicant/Assignee:

E-BRAIN SOLUTIONS LLC, 1200 Mountain Creek Road, Suite 440, Chattanooga, TN 34705, US, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

WARREN Peter, 1200 Mountain Creek Road, Suite 440, Chattanooga, TN 37405, US, GB (Residence), GB (Nationality), (Designated only for: US)
LOWE Steven, 1625 Starboard Drive, Hixson, TN 37343, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

MEHRMAN Michael J (agent), Paper Mill Village, Building 23, 600 Village
Trace, Suite 300, Marietta, GA 30067, US,

Patent and Priority Information (Country, Number, Date):

Patent: Wo 200135216 A2 20010517 (WO 0135216)

Application: WO 2000US31231 20001113 (PCT/WO US0031231)

Priority Application: US 99164884 19991112

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

- (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
- (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
- (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
- (EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 291515

10/3,K/3 (Item 2 from file: 349) DIALOG(R)File 349:PCT Fulltext

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A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR DETERMINING OPERATIONAL MATURITY OF AN OPERATIONS ORGANIZATION

SYSTEME, PROCEDE ET ARTICLE FABRIQUE PERMETTANT DE MESURER LA MATURITE OPERATIONNELLE D'UNE ORGANISATION D'OPERATIONS

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JB 's-Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US) Patent Applicant/Inventor:

GREENBERG Nancy S, 5529 Newton Avenue South, Minneapolis, MN 55410, US, US (Residence), — (Nationality), (Designated only for: US)

WINN Colleen R, 11472 Fairfield Road #103, Minnetonka, MN 55305, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L, Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200108038 A2 20010201 (WO 0108038)

Application: WO 2000US20399 20000726 (PCT/WO US0020399)

Priority Application: US 99361781 19990726

Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 82123

Fulltext Availability: Detailed Description

# Detailed Description

... are driving information systems management to a fundamentally new paradigm. While business bottom lines are more tightly coupled with information technology than ever before, studies indicate that many CEOs and CFOs feel that they are not getting their money's worth from their IT investments. The complexity of this environment demands... implementation costs with estimated business benefits? If yes, by whom (e.g. team, individual, management, etc.)? Does planning consider the following requirements and functions: hardware capacity and layout, HVAC and fire suppression, power, structural planning (i.e. n-itigate Manniade or natural disaster), and integration with security planning & management? If yes...backups of Mass StorageManagement configuration files or customized scripts Disaster recovery plan Example Storage policies, naming standards and storage hardware configurations and characteristics (e.g. maximum usage levelper device) are registered in the storage information database.

BP Number 2.10.3

BP Name Disk space Management for Mass Storage BP Description...

#### 10/3,K/4 (Item 3 from file: 349)

DIALOG(R) File 349:PCT Fulltext

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00601493 \*\*Image available\*\*

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SWITCHED TELEPHONY COMMUNICATION

SYSTEME PROCEDE ET ARTICLE CONCU POUR LES COMMUNICATIONS TELEPHONIQUES PAR RESEAU COMMUTE

Patent Applicant/Assignee:

MCI COMMUNICATIONS CORPORATION, MCI COMMUNICATIONS CORPORATION , 1133 19th Street, N.W., Washington, DC 20036 , US

Inventor(s):

ZEY David A, ZEY, David, A. , 4208 Ragsdale Court, Fuquay-Varina, NC 27526 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9847298 A2 19981022

Application: WO 98US7927 19980415 (PCT/WO US9807927) Priority Application: US 97835789 19970415; US 97834320 19970415

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN

Publication Language: English Filing Language: English Fulltext Word Count: 175758

Fulltext Availability: Detailed Description

#### Detailed Description

- ... Information content will be provided as an inbound service and an outbound service. The information content that is defined through the VAVVT Browser (Le., Profile Management) is defined as the inbound information content and will be limited to:
  - Stock Quotes and Financial News
  - Headline News.

Subscribers also have the ability to access additional information content through the ARU interface; however, this information is not configurable through the WWW Browser (i.e., Profile Management). This additional 106 information content will be referred to as outbound information content and will consist of o Stock Quotes and Financial News; o Headline...when a MCI switch is isolated). This display is also available for selected LEC end office switches.

H. Filter Definition Window
The SNMS operator can limited the scope of his displays to:

type of alarms that should be presented severity of alarms that should be presented acknowledged alarms, unacknowledged alarms, or...

...reports. They may also be produced on demand, or per a schedule. These reports may be presented in a number of ways, including but not limited to electronic mail 908, X-terminal displays 910, and printed reports 912.

XII. VIDEO TELEPHONY OVER POTS
The next logical step from voice over the...

10/3,K/5 (Item 4 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2001 WIPO/MicroPat. All rts. reserv.

00546286 \*\*Image available\*\*

DIGITAL DATA PROCESSING METHODS AND APPARATUS FOR FAULT ISOLATION PROCEDES ET DISPOSITIF DE TRAITEMENT DE DONNEES NUMERIQUES POUR L'ISOLATION DE DEFAUTS

Patent Applicant/Assignee:

STRATUS COMPUTER, STRATUS COMPUTER, 55 Fairbanks Boulevard, Marlboro, MA 01752, US

Inventor(s):

LEAVITT William I, LEAVITT, William, I., 180 Grove Street, Lexington, MA 02173, US

CLEMSON Conrad R, CLEMSON, Conrad, R., 1 Bowdoin Street, Shrewsbury, MA

01545 , US

SOMERS Jeffrey S, SOMERS, Jeffrey, S. , 1 Scott Lane, Northboro, MA 01532 , US

CHAVES John M, CHAVES, John, M., 7 Cornish Drive, Hudson, MA 01749, US BARBERA David R, BARBERA, David, R., 15 Hapgood Road, Worcester, MA 01605, US

CLAYTON Shawn A, CLAYTON, Shawn, A., 22 Lee Street &2, Worcester, MA 01602, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9746941 A1 19971211

Application: WO 97US9781 19970605 (PCT/WO US9709781)

Priority Application: US 96658563 19960605

Designated States: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT

SE

Publication Language: English Filing Language: English Fulltext Word Count: 115324

Fulltext Availability: Detailed Description

## Detailed Description

... be discarded 7FFFDO LED Control Read/Write no exact 7FTF F TC8 Slot ID -R-ea-d-Un-ly no exact 7PTF-CO Read Ping Interval ReadfWrite no exact 7FFFB8 Set Interrupt/Interrupt Status Read/Write no not impl.

7FFFBO Clear Interrupt Write only no 7FTFA8 Set Interrupt Maskiinterrupt ReadtWrite no...board to assert the cpu-pnIine backplane signal, thereby notifying other CPU boards that one CPU board has passed through the sync point.

Should the <code>cpu</code> -online backplane signal deactivate (say by the only on line CPU 29 December 1995 93 PCTfUS97/09781 Polo Software Programming Guide Stratus company Confidential breaking...is planned that this mode be used to support on-line upgrade of board with different processor speeds or memory sizes.

## 12.3.6 LED Control

Type: ReadfWrIte Offset [22:0]: 7FFFDO

Present on all Xbus boards

Cold and warm reset affect this register as documented below Compatibility: exact This register...on the Xbus to determine if there is still a target that intends to respond to the request. Writing a one sets the read ping interval to 31 bus phases, or 2.667 microseconds. This value is provided for diagnostic and simula tion use only. Writing a zero sets the interval...29 -26 PCI Slot Number Note: In HSC2, the most significant bit of the PCI slot number (bit [29]) is not used due to space limitations in the Mirage Map RAM. Since a HSC2 only supports 4 PC] devices this should not be considered an issue.

25-5 Reserved 4 Option...

?

12/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext

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## 00784185

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR STREAM-BASED COMMUNICATION IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT

SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE SERVICES DE COMMUNICATION

Patent Applicant/Assignee:

ANDERSEN CONSULTING LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)

Inventor(s):

BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,

Legal Representative:

HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200117195 A2 20010308 (WO 0117195)

Application: WO 2000US24125 20000831 (PCT/WO US0024125)

Priority Application: US 99386717 19990831

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 149088

Fulltext Availability: Detailed Description

# Detailed Description

... for transmitting data from a server to a client via pages in accordance with an embodiment of the present invention; Figure 96 depicts the response time for a User Interface to display a list of customers in a list box; Figure 97 shows a request that returns a large amount of ...such as a personnel file or a table of the latitudes and longitudes of cities.

An object can represent user-defined data types such as time, angles, and complex numbers, or points on the plane.

With this enormous capability of an object to represent just about any logically separable matters, OOP...Thus, new capabilities are created without having to start from scratch.

- O Polymorphism and multiple inheritance make it possible for different programmers to mix and **match** characteristics of many different classes and create specialized objects that can still work with related objects in predictable ways.
- O Class hierarchies and containment hierarchies...
- ... In a complex system, the class hierarchies for related classes can become extremely confusing, with many dozens or even hundreds of classes.
  - o Flow of control . A program written with the aid of class libraries is still responsible for the flow of control (i.e., it must control the interactions among all the objects created from a particular library). The programmer has to decide which functions to call at what times for

which kinds of objects.

Duplication of effort. Although class libraries allow programmers to use and reuse many small pieces of code, each programmer puts those pieces together in a different...report distribution database specifies where, when, how, and to whom to distribute the produced report. Specific destinations can include: printer(s), user(s), user groups, archives ( permanent storage ), and/or specific display devices such as workstations and terminals.

Several additional options exist for distributing reports including timed reporting, multiple copy distribution, and report...

## 12/3,K/2 (Item 2 from file: 349) DIALOG(R) File 349:PCT Fulltext

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00431955 \*\*Image available\*\*

SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION

SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION ELECTRONIQUE DES DROITS

Patent Applicant/Assignee:

ELECTRONIC PUBLISHING RESOURCES INC

Inventor(s):

GINTER Karl L

SHEAR Victor H

SPAHN Francis J

VAN WIE David M

Patent and Priority Information (Country, Number, Date):

WO 9627155 A2-A3 19960906 Patent:

Application: WO 96US2303 19960213 (PCT/WO US9602303)

Priority Application: US 95388107 19950213

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI TM TR TT UA UG UZ VN KE LS MW SD SZ UG AZ BY KG KZ RU TJ TM AT BE CH DE FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English Fulltext Word Count: 205184

Fulltext Availability: Claims

Claim

... may be conditional on a test (e.g., 3208(3)) such as, for example, whether content usage has exceeded a certain amount, whether a certain time period has expired, whether a certain calendar date has been reached, etc.

...for example, the PERCs 3100, 3125 shown in Figures 75A and 75B. The second control set 3154b may be used by "multiple negotiation" processes to manage the negotiation, and may provide two negotiation methods: "Negotiate 1," and "Negotiate2".

Both negotiation processes may be described as required methods ("Negotiatel" and "Negotiate2") 3156...

...the negotiation continues. Method option selections are made using the desired method and method options specified in the PERCs 3100, 3125. In this example, a control set for the PERC 3100 shown in Figure 75A may be compared against the PERC 3125 shown in Figure 75B. If there is a "match...

15/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00777012

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A JAVA BASED E-COMMERCE ARCHITECTURE

SYSTEME, PROCEDE ET ARTICLE MANUFACTURE DESTINES A UNE ARCHITECTURE DE COMMERCE ELECTRONIQUE BASEE SUR JAVA

Patent Applicant/Assignee:

AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 's-Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

HICKMAN Paul L, Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109721 A2 20010208 (WO 0109721)

Application: WO 2000US20561 20000728 (PCT/WO US0020561)

Priority Application: US 99364531 19990730

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 133442

Fulltext Availability: Detailed Description

Detailed Description

... ability to create a wide variety of user interface components.

With Java, developers can create robust User Interface (UI) components. Custom "widgets" (e.g., real-time stock tickers, animated icons, ...be set to include individual user accounts, groups/roles, or no security.

Application Server - Two file types are migrated within application servers, COM Dynamic Link Library 's and Java Classes. Both files are created during the application and architecture build processes. The COM DLL's require registration within NITS by inserting...one stage at any point in time. Consider the example of modulel. Modulel starts out in development. When the development team indicates, the Source Code Librarian moves module I into system test. As soon as that happens, no changes can be made to module I. Only after modulel is promoted to...a change control record indicating which modules have changed. As needed, the DBA checks modified database source code into source code control. A source Code Librarian 2604 verifies/prepares necessary objects for building new applications. Unit test and development is completed. hi some cases, a string test may be required. The...

...and prepares validation or test plan. Database modifications are fetched from source code control and applied to an assembly test environment 2702. The Source Code Librarian fetches new application, 153 builds it and copies it into assembly test environment 2704. Validation or test plan is executed pass/fail/deviation. The assembly test environment 2804. The Source Code Librarian fetches the new application, builds it and copies it into the system test environment. A validation or test plan is executed pass/fail/deviation. The...

...on the production plan 2902. Database modifications are fetched from source code control 2904 and applied to the production envirom-nent 2906. The Source Code Librarian fetches the new application, builds it and copies it into the production envirom-nent. The controlled change-tracking portion of the present description is signed...UPS may not shut down the server if the power failure is brief.

The Smart UPS 1400 should be configured with an interface to the **server**. The recommended interface is the serial port B (COM2) on most servers. PowerChute Plus 5. 0 software from American Power Conversion is the recommended choice...

15/3,K/2 (Item 2 from file: 349)

DIALOG(R) File 349: PCT Fulltext

(c) 2001 WIPO/MicroPat. All rts. reserv.

00761422

## BUSINESS ALLIANCE IDENTIFICATION

SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION POUR L'IDENTIFICATION D'ALLIANCES COMMERCIALES DANS UN CADRE D'ARCHITECTURE RESEAU

Patent Applicant/Assignee:

ACCENTURE LLP, 100 South Wacker Drive, Chicago, IL 60606, US, US (Residence), US (Nationality)

Inventor(s):

GUHEEN Michael F, 2218 Mar East Street, Tiburon, CA 94920, US, MITCHELL James D, 3004 Alma, Manhattan Beach, CA 90266, US, BARRESE James J, 757 Pine Avenue, San Jose, CA 95125, US,

Legal Representative:

BRUESS Steven C (agent), Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., P.O. Box 2903, Minneapolis, MN 55402-0903, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200073928 A2-A3 20001207 (WO 0073928)
Application: WO 2000US14375 20000524 (PCT/WO US0014375)

Priority Application: US 99320816 19990527

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English Filing Language: English Fulltext Word Count: 143341

Fulltext Availability: Detailed Description

Detailed Description

... Product Product Details

Name/ Category

System JavaPC Software - provides central administration 1.14 and support for the Java platform on PC-based thin client devices.

Management JavaPC is targeted at OEMs designing thin-client devices such as Tools transaction terminals, cash registers, kiosks and ATMs.

Product2 Management Console - Java-based utility...read and extract information from source code, screens, reports, and the database. The most common information extracted from a legacy system, however, is the data: record /table structure, indexes, and data element definitions.

In component-based architectures, as systems are often built on top of legacy databases, some extraction tools allow...for that purpose.

Compiler I Linker I Interpreter
This component is responsible for taking raw code (usually in ASCII format) and creating the necessary object, library, byte-code, or

executable files that become components of the final system. The actual tools required depend on the development language, but always consist of

... .

15/3,K/3 (Item 3 from file: 349)

DIALOG(R) File 349: PCT Fulltext

(c) 2001 WIPO/MicroPat. All rts. reserv.

00749027 \*\*Image available\*\*

UNIVERSAL SYNCHRONOUS NETWORK SYSTEM FOR INTERNET PROCESSOR AND WEB OPERATING ENVIRONMENT

SYSTEME DE RESEAU SYNCHRONE UNIVERSEL POUR PROCESSEUR INTERNET ET ENVIRONNEMENT DE FONCTIONNEMENT INTERNET

Patent Applicant/Assignee:

STANFORD SYNCOM INC, 2390 Walsh Avenue, Santa Clara, CA 95051, US, US (Residence), US (Nationality)

Inventor(s):

TRANS François, 1504 Clay Drive, Los Altos, CA 94024, US

Legal Representative:

MCNELIS John T, Fenwick & West LLP, Two Palo Alto Square, Palo Alto, CA 94306, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200062470 A1 20001019 (WO 0062470)

Application: WO 2000US10101 20000414 (PCT/WO US0010101)

Priority Application: US 99129314 19990414; US 99417528 19991013; US 99444007 19991119; US 99170455 19991213; WO 68US42 20000315

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 89135

Fulltext Availability:
Detailed Description

Detailed Description

... control of a universal time event via the Com2000" Clock Transfer technology is marching along between the communicating nodes. This precision and bias forward in time marking is used as the basis for a security seed.

This seed will be used to generate a true and unbreakable random number generator during one...and Upstream Frame Structure.

Figure 60 is an illustration of the UniNet Simplified Burst and Cell Structure.

Figure 61 is an illustration of the UniNet  $\mathbf{Time}$  Relationship between various Frame  $\mathbf{Markers}$ .

Figure 62 is an illustration of the UniNet Transmit Frame Gating Signal.

Figure 63 is an ... Key Encryption Control algorithms.

Figure 67L is an illustration of the RIPEMD- 160 Hash Control algorithms.

Figure 68 is an illustration of the UniNet Communication Processor

System Block Diagram.

Figure 69a is an illustration of the UniNet Baseband Converter and Sampler Block Diagram.

Figure 69b is an illustration of the UniNet...wireline and wireless network. The Com2000tm Intelligent (Modem) - Precision Sampling technology enables to the precision sampling of the signal's parameters or combination of the Time (Multi-Time Slot sampling), Phase (Mulfi-Channel Phase sampling) and Frequency (Muiti Carrier sampling) signal spaces. The non-synchronized in time, frequency and phase signal plane controls...

## 15/3,K/4 (Item 4 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00605427 \*\*Image available\*\*

UNIVERSAL EPISTEMOLOGICAL MACHINE (A.K.A. ANDROID)
MACHINE EPISTEMOLOGIQUE UNIVERSELLE (ANDROIDE A.K.A.)

Patent Applicant/Assignee:

DATIG William E, DATIG, William, E., P.O. Box 528, Centerport, NY 11721, US

Inventor(s):

DATIG William E, DATIG, William, E., P.O. Box 528, Centerport, NY 11721,

Patent and Priority Information (Country, Number, Date):

Patent:

WO 9849629 A1 19981105

Application: WO 98US8527 19980427 (PCT/WO US9808527)

Priority Application: US 97847230 19970501; US 98876378 19980303

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English Filing Language: English Fulltext Word Count: 262157

Fulltext Availability: Claims

Claim

... can lay claim to the ultimately real universe, and since the reader shall judge how the unified theory of knowledge and the science of androids compare to the heart's eternal knowing, the reader is asked to follow his or her own knowledge of the universe and truth of conscience in...of universes, or their plurality.

In the form of phenomenological composition, a causal element can be construed as the embodiment of a bounded or unbounded **plurality** of causal **elements** of causation themselves and of their connectednesses. In such a case, instead of considering single trajectories of' instances of objective forms in transformation (causal elements...

15/3,K/5 (Item 5 from file: 349)

DIALOG(R) File 349: PCT Fulltext

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00542109 \*\*Image available\*\*

APPARATUS AND METHOD FOR MANAGING AND DISTRIBUTING DESIGN AND MANUFACTURING INFORMATION THROUGHOUT A SHEET METAL PRODUCTION FACILITY

APPAREIL ET METHODE CORRESPONDANTE PERMETTANT DE GERER ET DE REPARTIR UNE INFORMATION RELATIVE A LA CONCEPTION ET A LA FABRICATION DANS UNE

# INSTALLATION DE PRODUCTION DE TOLES

Patent Applicant/Assignee:

AMADA METRECS CO LTD, AMADA METRECS CO., LTD., 806, Takamori,

Isehara­shi, Kanagawa 259­11, JP

AMADASOFT AMERICA INC, AMADASOFT AMERICA, INC., 14921 Northan Street, La Mirada, CA 90638, US

Inventor(s):

HAZAMA Kensuke, HAZAMA, Kensuke, 5102 Via Estancia, Yorba Linda, CA 92687, US

KASK Kalev, KASK, Kalev, 6376 Adobe Circle Road, Irvine, CA 92715, US SAKAI Satoshi, SAKAI, Satoshi, 9 Avignon, Newport Coast, CA 92657, US SCHWALB Moshe Edward, SCHWALB, Moshe, Edward, 26 Valley View, Irvine, CA 92715, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 9742607 A2 19971113

Application: WO 97US7473 19970506 (PCT/WO US9707473)
Priority Application: US 9616958 19960506; US 96700671 19960731

Designated States: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English Fulltext Word Count: 148636

Fulltext Availability: Detailed Description

### Detailed Description

... another) that has a length that is greater than 0 (i.e., the line entity is not a point but a real line). The geometrical **data** in the linked lists may be analyzed to determine the presence of such contact between any two faces in the part.

If a particular face...may be utilized to represent the sheet metal part and the bend model for the part may be implemented through a completely self-contained class library. In accordance with an aspect of the present invention, a description will now be provided of any exemplary data structure and access algorithm for the...oriented data model. As shown in Fig. 17, the bend model for the sheet metal part may be defined as a completely self-contained class library. All of the required data manipulation and functions for the sheet metal part (e.g., folding, unfolding, etc.) may be captured as member ftinctions of the class library. All of the geometrical and topological data may be defined in objects that are grouped within the bend model. The bend model class library may be a hierarchy of classes or objects with a part class being the top level class in the hierarchy. The part class may include...

... be performed on or to the part.

Fig. 17 shows an example of the various objects that may be grouped in the bend model class library. For example, a part class 50 may be provided that includes various attributes52. The part attributes 52 may include various part information such as the...part through an object oriented data model, all of the complex mathematical calculations, computational geometry and matrix transformations may be built into a single class library. Special bending operations, such as hemming, Z-bending and arc bending, may also be captured inside the class library

Further, manufacturing information, such as the V-width, the bend deduction amount, and the bend sequence, may be also captured within the class library. With the bend model, simultaneous dual representation of both the 2-D flat model and 3 D model may be effectuated, as shown in Fig ...display various views of the part based on the information provided in the bend model. The bend model viewer may comprise a set of application library modules that are used to visualize the sheet metal part. Further, the bend model viewer may be designed as a base view class of the

... view, a wire frame view, a 2-D flat view and an orthographic view.

According to an aspect of the invention, the bend model class **library** 80 may include a set of procedures or functions that act upon sheet metal parts depending upon the selected view (e.g., solid, wire, 2...

- ...102; and, depending upon the state of the bend model viewer, the bend model viewer view class may call functions from the bend model class library 80. As shown in Fig. 18, the various view model attributes or features 88 that may be selected by a user may include a solid...
- ...viewing modes and functions. Recent advancements and developments in computer based 2-D and 3-D modeling and simulation, such as the availability of graphics libraries or packages, may be applied to implement these features of the present invention. In addition, a wide variety of publications and material are available regarding graphics packages, such as OpenGL and RenderWare, may be used to provide graphical computations. Such graphics libraries or packages may be Windows based applications and can be used to render the various viewing modes. OpenGL, for example, may be used to render...
- ...example, the station module of the operator. The bend model data may then be reformatted in accordance with the data format utilized by the graphics library or package (e.g., OpenGL or RenderWare) that is utilized. Thereafter, the graphics data may be processed in accordance with various programmed routines in order...
- ...or 3-13 representation by the user (e.g., by moving a joystick or a mouse), additional function calls may be made to the graphics **library** to update the rendered image.

To provide the wire frame views of the part, the line entity data of the part may be provided to...of the part may be selected in order to simulate the material specified for the part in the database. For this purpose, a material texture library may be provided that comprises a library of material textures, such as steel, stainless steel, aluminum, etc. The stored material texture library may be accessed and applied by an operator when a solid view is present, so that the surface of the displayed part will more closely...entity or portion of the part is assigned the same screen point as the point of interest. A function call to a graphics package or library (such as OpenGI or RenderWare) may be made to determine whether more than one point of the part is assigned to the same screen point...bend sequence.

After the bending sequence has been determined, the operator decides what type of tooling should be used by selecting tools from a stored library of tooling data, as shown at step S.236. The pertinent tooling information maybe displayed to the bending operator on the shop floor and display menus may be provided to graphically aid the bending operator in selecting tooling from the library. Once a particular tool has been selected from the library, the pertinent data relating to the tool may be indicated on the screen. Fig. 31 illustrates an example of the various display menus and data...

- ...1, successive display menus or screen displays are graphically displayed in order to aid the bending operator in picking a particular tool from the tool library. The successively displayed screen displays may be displayed simultaneously on the display device (e.g., in overlapping or cascading fashion), or may be individually displayed...
- ...has been selected, the particular data for that tool may be provided in a table and displayed to the operator. The data in the tooling library may be predefined and is stored (e.g., in database 30) during an initial set-up procedure of the software. The manual tool selection feature...of a collision to the user.

The tool data that is used to detect for collisions may be actively taken out of a tool shape library based on the tooling selection(s) made by the user. Recalculation of a collision at any intermediate bending step

may be performed based in a...

...control various viewing functions (e.g., zoom, pan, rotate, etc.) when viewing the rendered model of the sheet metal part. The joystick device maybe a multi -axisjoystick and include select and control buttons. Thejoystick maybe implemented through various commercially available joystick devices, including a Microsoft SideWinderjoystick, and may be plugged into a game port of the computer...intfentl++; fentc.gcount[fent-group(intfent)]++ return (fentc); APPENDIX B This function counts the number of FENTs in a specified set of an intfent matrix.

Note: The intfent matrix is symmetric. only half of the matrix are included in the counting.

FENTCOUNT count-specified fents matrix ( int \*pintfentmatrix, int \*Socationlist, int...

15/3,K/6 (Item 6 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00387555

ENHANCING OPERATIONS OF VIDEO TAPE CASSETTE PLAYERS AMELIORATION DU MODE OPERATOIRE DE MAGNETOSCOPES

Patent Applicant/Assignee: YUEN Henry C

KWOH Daniel S MANKOVITZ Roy J

HINDMAN Carl

NGAI Hing Y

NG Yee Kong

LEUNG Elsie Y

Inventor(s):

YUEN Henry C

KWOH Daniel S

MANKOVITZ Roy J

HINDMAN Carl

NGAI Hing Y

NG Yee Kong

LEUNG Elsie Y

Patent and Priority Information (Country, Number, Date):

Patent:

WO 9518449 A2-A3 19950706

Application:

WO 94US14988 19941229 (PCT/WO US9414988)

Priority Application: US 93176852 19931230

Designated States: AM AT AT AU BB BG BR BY CA CH CN CZ CZ DE DE DK DK EE ES FI FI GB GE HU KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TT UA UZ VN KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT

LU MC NL PT SE CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English Fulltext Word Count: 97919

Fulltext Availability: Detailed Description

Detailed Description

... 9, and a control and audio track head logic circuit 11 of the VCR 1, as well as to the video display 50 and the microprocessor controller 31 of the directory controller 30.

The motor and mechanical control logic circuit 5 controls loading and ejecting of the cassette 40 and also...

...15.

I The directory controller 30 includes a microprocessor controller 3 1, a random access memory (RAM) 33 and a directory input/output display and

- control panel 32. Prefetably the microprocessor controller 31
  comprises an integrated circuit microprocessor, a program store 31a,
  such as a read-only-memory (ROM), for storing a control program to
  implement methods of the invention, and a clock...
- ...30 and interfaces with the VCR control logic circuit 21 to implement the necessary functional capabilities for reading, updating and recording. the directory. The micro **processor** controller 31 in the indexing VCR 10 performs all indexing functions and human interface, interprets (e.g. tab, indent, screen format, attributes) and processes the...
- ...31 is illustrated below in conjunction with FIGs. 99-103.

The RAM 33 is a conventional random access semiconductor memory which interfaces directly with the microprocessor controller 31. The RAM 33 is preferably non-volatile.

Alternatively, the RAM 33 is battery backed up. The battery back up should maintain the contents...33. Alternately, as discussed below, an on-screen display 50a can be used. The directory information stored in the RAM 33 is processed by the microprocessor controller 31.

The VCR 1 additionally comprises a character generator circuit 23 coupled to the, ...tape (e.g., the beginning of the tape). The absolute address preferably has an accuracy of ± 3 minutes in SLP mode and ± 1 minute in SP mode. The absolute address is preferably written in 1/4 minute units in SLP mode. As described below, the absolute address is part of the TPA packet that is written on the VBI, typically line 19... bus and become the talker (also referred to as a driver). At any one time, only one talker is allowed on the bus. During this time, all other units are listeners. Once the related activities are finished, the talker must give up the bus.

The bus interface circuit 71 comprises a...

...standard TTL load on the bus.

The data on the bus is preferably serial data comprising data cells. Each data cell is defined as the **time** slot between two high to low transitions. The bit length is typically 2.0 milliseconds. Data is preferably encoded in Manchester code. A "zero" is...high transition. Thus, it is a "half" bit. It is not a data bit but a terminator bit. Its width is preferably 2 to 4 **times** the width of the regular bit length.

Referring now to FIG. 21, the initiating unit (VCR system 10) is a listener and monitors the bus...

15/3,K/7 (Item 7 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00384204

AUDIO AND VIDEO SUBSYSTEMS FOR COMPUTER-BASED CONFERENCING SYSTEM SOUS-SYSTEMES AUDIO ET VIDEO POUR SYSTEME DE TELECONFERENCE INFORMATISE Patent Applicant/Assignee:

INTEL CORPORATION
Inventor(s):
 TUNG Peter

GUTMANN Michael VRVILO Benjamin

Patent and Priority Information (Country, Number, Date):

Patent: WO 9515047 A2-A3 19950601

Application: WO 94US13553 19941121 (PCT/WO US9413553)
Priority Application: US 93157478 19931124; US 93158246 19931124
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English

Fulltext Word Count: 6875

Fulltext Availability: Claims

#### Claim

... used to de-gated the CPU and other devices from the bus during DMA cycles. When this signal is active (high) the DMA controller has control of the bus. The ASIC does not respond to bus cycles when AEN is active.

10CS16# The 1/0 16-bit chip select is used...copy a file from the computer into the notebook and review it with a remote user during a call. When the user is sharing the **notebook** (this **time** is called a "meeting"), the users see the same information on their computers, users can review it together, and make notes directly into the notebook...

15/3,K/8 (Item 8 from file: 349) DIALOG(R)File 349:PCT Fulltext

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00243650

# SIGNAL PROCESSING APPARATUS AND METHODS DISPOSITIF ET PROCEDES DE TRAITEMENT DE SIGNAUX

Patent Applicant/Assignee:

HARVEY John C

Inventor(s):

HARVEY John C

CUDDIHY James W

Patent and Priority Information (Country, Number, Date):

Patent:

WO 8902682 A1 19890323

Application:

WO 88US3000 19880908 (PCT/WO US8803000)

Priority Application: US 8796096 19870911

Designated States: AT AU BE BJ BR CF CG CH CM DE DK FI FR GA GB GB HU IT JP

KP LK LU MC MG MW NL NO RO SE SN SU TD TG

Publication Language: English Fulltext Word Count: 168452

Fulltext Availability:

Claims

#### Claim

... said bits at particular SPAM-format register memory. Said bits \* are the bits of the meter-monitor format field of said command.

Then, automatically, by comparing the information at said SPAM-format memory with preprogrammed format-specification information, SPAM-controller, 205C, determines that said V information at memory matches particular information...unit instructions when said instructions were executed by said load-run-and-code instructions in the course of the processing of said first message). A match results (which indicates that SPAM-controller, 205C, executed said load-run-and-code instructions under control of said first message.) (At any subscribor station where information at first...receive the next instance of SPAM message information. Automatically, SPAM-controller, 205C, determines that the information at said SPAM-header-@205 register memory does not match said cause-retention-of-exec information that is "01"; causes all apparatus of SPAM-controller, 205C, to delete from memory all' information of said transferred...the execution segment of a SPAM command. Receiving the next X bits of said binary information from said valve causes controller, 39, to select and record said next X bits (the execution segment of the third combining synch command) at said SPAM-exec register memory, compare the information at said SPAM...instructions to determine whether said jossibility exists. Instead, said transfer-a-10-header message instructions include particular preprogrammed 10 header-end-condition information. At those times H+X bits of binary information fill a whole number of signal words

exactly, said information is the binary value of zero.

At all...

...one. In the preferred embodiment where signal words are eight-bit bytes said 10-header-word-length information equals ( H+X / 8 ) - 1. At those times when H+X bits of binary information do not fill a whole number of signal words exactly and the quotient of H+X divided by...untransferred.

Then said evaluate-padding-bits-I instructions cause je controller, 39, to detetmine that the zero information at A3Z said SPAM"Flag-working memory matches said continue-? information that is "0". Resulting in a match causes controller, 39, to execute said assess-padding-bit instructions. said instructions cause controller, 39, to compare said last byte to said end-?-EOFS-WORD...select and record said H bits (said "ll" header) at said SPAM-header register memory then determine that the information at said SPAM-header memory matches said 11 header-invoking information that is "ll". Said match causes controller, 39, to execute particular preprogrammed proc6ts-\* 11-header-message instructions. Said instructions cause controller, 39, to execute controlled functions as if the information...segment, said fourth message has an "11" header and contains no execution segment information. Accordingly, receiving said fourth message does not cause controller, 39, to record 12 information at said SPAM-last-01-header-exec memory. When controller, 39, compares the information at said SPAM-header register memory to said cause-retention-of-exec information that is "01", no match results. The information that was at said memory when said message was received -- specifically, the execution segment of the first message--remains at said memory...said fourth message does not cause SPAM-controller, 205C, to record information at said SPAM-last-ol-header-ekec memory-@205. When SPAM-controller, 205C, compares the information at said SPAM-header-@205 memory to said cause-retention-of-exec-@205 information that is "01", no match results. The information that...

```
File
       2:INSPEC 1969-200 ul W5
(c) 2001 Institution of Electrical Engineers
File.
       8:Ei Compendex(R) 1970-2001/Jul W5
         (c) 2001 Engineering Info. Inc.
       6:NTIS 1964-2001/Aug W3
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File 99: Wilson Appl. Sci & Tech Abs 1983-2001/Jun
         (c) 2001 The HW Wilson Co.
File 144: Pascal 1973-2001/Jul W5
         (c) 2001 INIST/CNRS
File 77:Conference Papers Index 1973-2001/Jul
         (c) 2001 Cambridge Sci Abs
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         (c) 1998 Inst for Sci Info
File 34:SciSearch(R) Cited Ref Sci 1990-2001/Aug W1
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     94:JICST-EPlus 1985-2001/Jul W1
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         (c) 2001 Japan Science and Tech Corp(JST)
     35:Dissertation Abs Online 1861-2001/Jul
File
         (c) 2001 ProQuest Info&Learning
File 202:Information Science Abs. 1966-2001/ISSUE 04
         (c) Information Today, Inc
                Description
Set
        Items
                (LONG() TERM OR PERMANENT OR ARCHIV? OR MASS) (10N) (STORAGE?
        42214
S1
             OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY?(2W)(DI-
             SK? ? OR DISC? ?)
s2
                (SERVER? OR DATA OR FILE OR FILES) (10N) (BACKUP? OR BACK???-
        60223
             ()UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR
              SECONDARY)
s3
        61335
                (COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR
              CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR -
             CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI)(3N)-
             (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4
       326453
                (COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST???
              OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?)(5N)(TIME? OR
             HOUR?? OR MINUTE? ? OR INTERVAL?)
                CAPACIT? OR LIMIT? OR MAXIMUM?
S5
      3873511
                (TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUS-
S6
         1912
             EL? OR AUTOMATION()SYSTEM?)
s7
       599094
                ROBOT? OR CYBERNET? OR AUTOMATE?
                S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7
S8
            0
S9
                S1 AND S2 AND S3 AND S4 AND S5
S10
       361321
                S4 OR TIME(2N)SIGNAL????
S11
                S1 AND S2 AND S3 AND S10
S12
            5
                (S1 OR S2) AND S3 AND S10 AND (S5 OR S6 OR S7)
                RD (unique items)
S13
                S13 NOT FUEL?
S14
            3
S15
            9
                S1 AND S2 AND S4 AND S5
            9
                S15 NOT S12
S16
S17
            7
                RD (unique items)
S18
         8680
                AU=(MIDGLEY, C? OR MIDGLEY C? OR WEBB, J? OR WEBB J? OR CH-
             ARTIER, D? OR CHARTIER D? OR GONSALVES, C? OR GONSALVES C? OR
             HANSEN, T? OR HANSEN T?)
S19
           11
                S18 AND (S1 OR S2)
S20
                S19 AND (S3 OR S4 OR S5 OR S6 OR S7)
S21
                S19 NOT (PROTEIN? OR QUASAR? OR FUEL OR HOSPITAL?)/TI
```

14/5/1 (Item 1 from DIALOG(R) File 2: INSPEC 2)

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5156733 INSPEC Abstract Number: A9604-8770-001, B9602-7510-008, C9602-7330-175

Title: A Holter type system for study of plantar foot pressures
Author(s): Harris, G.F.; Abu-Faraj, Z.U.; Wertsch, J.J.; Abler, J.H.;
Vengsarkar, A.S.

Author Affiliation: Dept. of Biomed. Engng., Marquette Univ., Milwaukee, WI, USA

Journal: Biomedical Engineering, Applications Basis Communications vol.7, no.4 p.409-15

Publisher: Biomed. Eng. Soc. Republic of China,

Publication Date: 25 Aug. 1995 Country of Publication: Taiwan

CODEN: YIGOEO ISSN: 1016-2356

SICI: 1016-2356(19950825)7:4L.409:HTSS;1-A

Material Identity Number: B351-95005

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: A Holter type, microprocessor based, portable, in-shoe, plantar pressure data acquisition system has been developed. The system offers 16M bytes of data storage capacity and allows the long term monitoring of plantar pressures during the activities of daily living. The system can collect pressure data from 14 discrete sensor locations at a 20 Hz sampling frequency for 16 hours of continuous recording. The system employs the Interlink Force Sensing Resistor technology to measure plantar pressures. The unit operates under three different modes: continuous, intermittent, and real time. The system microprocessor employs custom software that controls data acquisition and sensor calibration, interfaces a dot matrix liquid crystal display module, performs memory checking diagnostics, and monitors battery status. Additional PC software is developed to convert raw voltage data into pressure metrics, determine various gait parameters, conduct statistical analysis, and display analysis results. The system was during multiple trials with adult male subjects. Results indicated that system performance was sufficiently acceptable for further clinical applications and long term study of daily living activities. Refs)

Subfile: A B C

Descriptors: biomechanics; biomedical electronics; computerised monitoring; data acquisition; medical diagnostic computing; medical signal processing; patient monitoring; portable instruments; pressure sensors Identifiers: Holter type system; plantar foot pressures; microprocessor based; portable; in-shoe; plantar pressure data acquisition system; long term monitoring; discrete sensor locations; Interlink Force Sensing Resistor technology; continuous; intermittent; real time; custom software; sensor calibration; dot matrix liquid crystal display module; memory checking diagnostics; battery status; PC software; gait parameters; statistical analysis; multiple trials; system performance; clinical applications; daily living activities; 16 MB; 20 Hz

Class Codes: A8770 (Biomedical engineering); A8745 (Biomechanics, biorheology, biological fluid dynamics); B7510 (Biomedical measurement and imaging); B7230 (Sensing devices and transducers); B7210G (Data acquisition systems); B7210B (Automatic test and measurement systems); B7320V (Pressure and vacuum measurement); C7330 (Biology and medical computing); C7410H (Computerised instrumentation); C3240D (Electric transducers and sensing devices); C3385 (Biological and medical control systems); C5520 (Data acquisition equipment and techniques)

Numerical Indexing: memory size 1.7E+07 Byte; frequency 2.0E+01 Hz Copyright 1996, IEE

14/5/2 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

1853454 NTIS Accession Number: PB95-163895

# Configuration and Personance Evaluation of a Real-Time Robot Control System: A Skeleton Approach

(Final rept)

Wheatley, T.; Michaloski, J.

National Inst. of Standards and Technology (NEL), Gaithersburg, MD. Robot Systems Div.

Corp. Source Codes: 092731009

1990 4p

Languages: English Document Type: Journal article

Journal Announcement: GRAI9506

Pub. in Proceedings of Institute of Electrical and Electronics Engineers International Conference on Systems Engineering, Pittsburgh, PA., August 9-11, 1990, p268-271.

NTIS Prices: Not available NTIS

Country of Publication: United States

The use of a skeleton system to model a multi-processor control architecture offers the system designer a powerful tool to configure and evaluate system parameters. This paper describes the skeleton approach as applied to the NASREM robot control architecture. The skeleton approach creates the shell of a functioning real-time control system utilizing the actual hardware and operating system code without using actual application code. This is done by replacing the processing part of the application code with time delays. Parameterization of time delays, communication paths, message buffer lengths, and process allocation provides for rapid prototyping of alternative system architectures. Actual system performance is measured to provide realistic data on computation and communication loads. The skeleton reporting facility provides quantitative assessments of system activity. To illustrate the use of this technique, the servo level of the NASREM hierarchy will be modeled using a 5.0 msec cycle time on a multiprocessor system, and compared with the actual system.

Descriptors: Robot control; \*Systems analysis; \*Performance evaluation; Real time; Computer system hardware; Operating systems(Computers); Multiprocessors; Concurrent processing; Hierarchies; Control systems; Reprints

Identifiers: Skeleton systems; NTISCOMNBS

Section Headings: 62GE (Computers, Control, and Information Theory--General); 62B (Computers, Control, and Information Theory--Computer Software)

## 14/5/3 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

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13335556 PASCAL No.: 98-0061696

## The Movie-2 digital audio/video expansion bus

LEGAULT A; MATEY J

Matrox Electronic System, Ltd., Dorval, P.Q., H9P 2T4, Canada SMPTE Technical Conference and World Media Expo, 138 (Los Angeles, Calif. USA) 1996-10-08

Journal: SMPTE journal: (1976), 1997, 106 (10) 718-723

ISSN: 0036-1682 Availability: INIST-3282; 354000069876560060

Document Type: P (Serial); C (Conference Proceedings); A (Analytic)

Country of Publication: United States

Language: English

The use of economical, general-purpose personal computers (PCs) in demanding professional video applications like nonlinear editing, graphics creation, animation recording, three-dimensional (3-D) rendering, video-on-demand, and commercial insertion continues to grow. In these applications, specialized PC adapters are typically used to handle the massive processing requirements for transporting natural data types in real time. Commonly used subsystems include video input/output (I/O), video video (DVE-mixing)), (digital processing effects compression/decompression (codec), audio I/O, audio processing (equalization (EQ)-mixing), mass storage interface, network interface, and video-in-a-window console display. Although it is possible to

accomplish some of the tasks with host central processing unit (CPU) software and a single highly integrated adapter, must professional systems require more than one adapter. How to connect these multiple video adapters together inside a PC is a question that system integrators have been wrestling with for many years. This paper examines the limitations of commercially available buses in these demanding broadcast video applications, proposes the Movie-2 bus as a high-performance open-architecture standard that overcomes these limitations, discusses the Movie-2 bus in detail, and finally, presents a model of a typical nonlinear editing platform as an example of system-level Movie-2 bus implementation.

English Descriptors: Computer architecture; Equalization; Personal
 computers; Real time; Video signal; Central unit

French Descriptors: Architecture ordinateur; Egalisation; Ordinateur personnel; Temps reel; Signal video; Unite centrale; Bus transmission

Classification Codes: 001D03J07
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17/5/1 (Item 1 from File: 2)
DIALOG(R)File 2:INSPEC

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6545473 INSPEC Abstract Number: C2000-05-6120-017

Title: Redundant optical storage system using DVD-RAM library

Author(s): Tanabe, T.; Takayanagi, M.; Tatemiti, H.; Ura, T.; Yamamoto, M.

Author Affiliation: NTT Integrated Inf. & Energy Syst. Labs., Tokyo, Japan

Conference Title: 16th IEEE Symposium on Mass Storage Systems in cooperation with the 7th NASA Goddard Conference on Mass Storage Systems and Technologies (Cat. No.99CB37098) p.80-7

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 1999 Country of Publication: USA vii+276 pp.

ISBN: 0 7695 0204 0 Material Identity Number: XX-2000-00530

U.S. Copyright Clearance Center Code: 1051-9173/99/\$10.00

Conference Title: 16th IEEE Symposium on Mass Storage Systems in cooperation with the 7th NASA Goddard Conference on Mass Storage Systems and Technologies. Information-based Access to Storage: Foundation of Information Systems

Conference Sponsor: IEEE Comput. Soc.; IEEE

Conference Date: 15-18 March 1999 Conference Location: San Diego, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A Digital virtual Disk (DVD) random access memory (RAM) Redundant Array of Inexpensive Libraries (RAIL) optical storage system has been developed and tested at NTT Integrated Information and Energy Systems Laboratories. The RAIL storage system incorporates multiple DVD libraries that consist of dual DVD-RAM drives. Each DVD library utilizes a single mechanical robot picker for media loading and unloading. The current capacity of the single sided and single layered DVD optical media used in that system is 2.6 gigabytes. To increase the reliability of stored data at the same time to eliminate the need for read after Mite verification, a process that can double the recording time, a RAID 4 algorithm has been implemented in the control unit of the RAIL storage system. Data sent by the host are transferred to a control unit, that stripes data over five data groups plus one parity unit. The striped and parity data are sent to individual libraries and written to DVD media. This system writes and retrieves storage data with a transfer rate of approximate 6 MB/sec, using write and read control methods that minimize data striping overhead. Other performance factors that affect the transfer rates are the striping size and the number of drives used in the RAIL system. Experimental results indicate that stripe sizes of 32 to 64 KB are sufficient to achieve high throughput. In addition, the transfer rates showed no further increase when the number of drives exceeded eight. This RAIL optical storage system which offers data redundancy can be used for networked multimedia applications. (6 Refs)

Subfile: C

Descriptors: optical disc storage; redundancy; virtual storage Identifiers: redundant optical storage system; DVD-RAM; DVD library; RAIL optical storage system; data redundancy; networked multimedia Class Codes: C6120 (File organisation); C5320K (Optical storage) Copyright 2000, IEE

17/5/2 (Item 2 from file: 2) DIALOG(R)File 2:INSPEC

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6260921 INSPEC Abstract Number: A1999-13-6110F-007, C1999-07-7320-043

Title: Computer network system with security for a protein data collection system at the Photon Factory

Author(s): Sasaki, K.; Watanabe, N.; Sakabe, N.; Sakabe, K. Author Affiliation: Sch. of Inf. & Sci., Nagoya Univ., Chikusa, Japan

Journal: Journal of Symprotron Radiation vol.6, pt. p.116-18
Publisher: Munksgaard International Booksellers and Parishers for Int.
Union Crystallogr,

Publication Date: 1 March 1999 Country of Publication: Denmark

CODEN: JSYRES ISSN: 0909-0495

SICI: 0909-0495(19990301)6:2L.116:CNSW;1-D Material Identity Number: D106-1999-003

Language: English Document Type: Journal Paper (JP)

Treatment: Experimental (X)

Abstract: In 1997 the prefabricated house of the TARA Sakabe project was constructed very near to the Photon Factory ring, and many computers were installed for crystallographic data handling. A data server with high speed and large capacity was required to improve the efficiency of the protein data collection system which integrated a `high'-security computer network. The new network, based on a 100 Mbps Ethernet, consists of a DEC AlphaServer 4000 with a 115 Gbytes RAID disk, DLT as a backup device, CISCO PIX-32 as a firewall between the TARA private network and KEK, and a 100 Mbps switching hub to be linked to imaging-plate readers and workstations. Therefore, the digital output data from the imaging-plate reader are directly recorded on the server disk resulting in higher efficiency of the users' beam time. In contrast to recording on tape, there is very little problem with backup resulting in a high confidence in the data -collection system. (7 Refs)

Subfile: A C

Descriptors: computer networks; data acquisition; high energy physics instrumentation computing; nuclear electronics; storage rings; synchrotron radiation; X-ray apparatus; X-ray crystallography

Identifiers: computer network system; protein data collection; crystallographic data handling; collection system efficiency; data server; high-security computer network; DEC AlphaServer; RAID disk; backup device; digital output data; imaging-plate readers; data-collection system; CISCO PIX-32 firewall; TARA private network; KEK; switching hub; data acquisition system; protein crystallography

Class Codes: A6110F (Experimental X-ray diffraction and scattering techniques); A6110M (Crystal structure solution and refinement techniques using X-rays); A0785 (X-ray, gamma-ray instruments and techniques); A0650M (Computing devices and techniques); A2920D (Storage rings); C7320 (Physics and chemistry computing); C7410H (Computerised instrumentation); C5520 (Data acquisition equipment and techniques)

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# 17/5/3 (Item 3 from file: 2)

DIALOG(R) File 2:INSPEC

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01159068 INSPEC Abstract Number: C78005818

Title: A direct access terabit laser archival memory

Author(s): Heard, H.G.

Author Affiliation: Inst. for Advanced Computation, Ames Res. Center, NASA, Moffett Field, CA, USA

Conference Title: Proceedings on very large data bases p.254-8

Publisher: IEEE, New York, NY, USA

Publication Date: 1977 Country of Publication: USA 570 pp.

Conference Sponsor: ACM; IEEE

Conference Date: 6-8 Oct. 1977 Conference Location: Tokyo, Japan

Language: English Document Type: Conference Paper (PA)

Abstract: This paper addresses recent developments in terabit-level laser archival memory storage technology. The laser memory employs a 500 milliwatt 514.5 nanometer wavelength argon-ion optical laser source to melt permanent bit patterns into a rhodium-coated flexible plastic data storage strip. The same laser, operated at an order of magnitude less power output, is used to read the stored binary data. Information densities of 2.5\*10/sup 7/ bits per square inch are achieved as limited by tracking and beam spot size. Because each data record is permanent, truly archival storage (approximately 25 years) is only limited by dust build-up. Extensive error correction codes enable performance at the 10/sup

-10/ bit error rate left. The system is supported by ensive software that provides call-by-hade file access. Operating at period data rates of 5 megabits/second, the system behaves as an on-line direct-access file, with an on-line capacity equivalent to several thousand 1600 BPI 2400-foot rolls of magnetic tape. Worst case access time to any record is of the order of seconds. Average user-data transfer rates can be as high as 2.86 megabits per second with full data redundancy. (6 Refs)

Subfile: C

Descriptors: optical stores

Identifiers: direct access; terabit; laser archival memory; flexible

plastic data storage strip

Class Codes: C5320K (Optical storage); C6120 (File organisation)

## 17/5/4 (Item 1 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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#### 00630063 01PI05-007

## Back up even your CDs

Delaney, John R

PC Magazine , May 8, 2001 , v20 n9 p47, 1 Page(s)

ISSN: 0888-8507

Company Name: Toshiba

URL: http://www.sdd.toshiba

Product Name: Toshiba SD-W2002 DVD-RAM

Languages: English

Document Type: Hardware Review Grade (of Product Reviewed): C Geographic Location: United States

Presents a mixed review of Toshiba SD-W2002 DVD-RAM (\$550), DVD-RAM optical disk drive from Toshiba America Electronics Components of Irvine, CA (949). Explains that it offers the ability to store over 4.7GB of data on a single DVD-RAM disk, which is approximately seven times the storage capacity of CD-Recordable (CD-R) and CD-Rewriteable (CD-RW) drives. Highlights DVD-RAM media that can be erased and rewritten up to 100,000 times, CyberLink's PowerDVD software for DVD movie playback, and VOB's Instant Write/Instant Read software. Mentions, however, that both the drive and t are expensive, and it cannot burn audio CDs for standard CD players Concludes that it is attractive for backing up huge data files storing large video and music files. On a scale ranging from 1 t received the rating of 3. Includes a photo and a product summary. (MEM)

Descriptors: Optical Disk Drive; DVD; RAM; Erasable Optical Disk; Backup; Information Storage; Mass Storage

Identifiers: Toshiba SD-W2002 DVD-RAM; Toshiba

# 17/5/5 (Item 2 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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## 00303935 93HP02-002

The optical-enabled office -- New applications abound as optical storage becomes faster, cheaper and more flexible

Levine, Ron

HP Professional , February 1, 1993 , v7 n2 p22-28, 4 Page(s)

ISSN: 0986-145X Languages: English

Document Type: Buyer and Vendor Guide

Geographic Location: United States

Provides a buyer's guide to optical storage devices. Notes that with optical storage technology, large-scale data collection tasks can be further automated, and such devices are being used on large-capacity systems and networks for unattended daily data backups. Though access times, for optical drives are slow compared to magnetic media, they provide larger capacity, as well as higher media reliability due to the lower possibility of head crashes. Notes applications include CD-ROM

distribution of inform on and software, WORMs for rchiving, and rewritable optical systems for storage. Says that erformance is improving. Reports the use of ''floptical'' disks, along with products of various companies that increase optical drive performance, make optical data accessible to network users; also notes features such as data encryption, 14-inch WORM platters which store up to 10.2 Gb of information, and scalable optical storage. (jo)

Descriptors: Optical Disk; CD-ROM; WORM; Vendor Guide

17/5/6 (Item 1 from file: 94) DIALOG(R) File 94: JICST-EPlus (c) 2001 Japan Science and Tech Corp(JST). All rts. reserv. 04594137 JICST ACCESSION NUMBER: 00A0327313 FILE SEGMENT: JICST-E High-Speed Optical Library System Using Digital Versatile Disk Random Access Memory. TANABE T (1); URA T (1); YAMAMOTO M (1) (1) Ntt Cyber Space Lab., Tokyo, Jpn Jpn J Appl Phys Part 1, 2000, VOL.39, NO.2B, PAGE.920-924, FIG.9, TBL.3, ISSN NO: 0021-4922 JOURNAL NUMBER: G0520BAE UNIVERSAL DECIMAL CLASSIFICATION: 681.327 621.3:681.327.1 LANGUAGE: English COUNTRY OF PUBLICATION: Japan DOCUMENT TYPE: Journal ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication ABSTRACT: A high-data -transfer-rate optical storage system using a redundant array of inexpensive libraries (RAIL) has been developed and tested. It incorporates multiple libraries, where each library consists of dual digital versatile disk (DVD) random access memory (RAM) drives and a single robotic hand and holds 2.6 GB DVD disks. To increase the reliability of data storage and at the same time to eliminate the need for read-after-write verification, which doubles the recording , a redundant array of inexpensive drives (RAID ) 4 algorithm is implemented in the control unit of the storage system. Data sent by the host is transferred to a control unit, which stripes the data into five data groups plus one parity unit. The striped and parity data is sent to individual libraries and written to the DVD disks. This system writes and retrieves data with a transfer rate of approximately 6 MB/s, using write and read control methods that minimize the data striping overhead. This reliable library system can be used for networked multimedia applications. (author abst.) DESCRIPTORS: library(computer); computer programming; file system; digital recording; optical disk; RAM; high speed; file transfer; transmission speed; data storage; disk drive mechanism; memory capacity; multi-media; information network BROADER DESCRIPTORS: software; file processing; treatment; recording; information medium; memory(computer); equipment; velocity; data transfer; transmission characteristic; characteristic; information storage; storage and accumulation; driving mechanism; mechanism; memory characteristic; capacity; information media; network CLASSIFICATION CODE(S): JC04060F; NC06020F (Item 2 from file: 94) DIALOG(R) File 94: JICST-EPlus (c) 2001 Japan Science and Tech Corp(JST). All rts. reserv.

01518841 JICST ACCESSION NUMBER: 92A0265839 FILE SEGMENT: JICST-E Trends in Development of Optical Disk Storage.
HIRAMATSU TAKUMI (1); YAMADA ICHIRO (2); WATABE AKINORI (2)
(1) Nippon Telegraph & Telephone Corp.; (2) NTT Kyokairyoikiken
NTT R D, 1992, VOL.41,NO.3, PAGE.335-344, FIG.8, REF.15
JOURNAL NUMBER: F0137ACY ISSN NO: 0915-2326
UNIVERSAL DECIMAL CLASSIFICATION: 681.327
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal
ARTICLE TYPE: Original par
MEDIA TYPE: Printed Publication

ABSTRACT: With the progress of the information society, external storage devices need to become faster and larger capacity. Optical disk storage, which offers an exteremly high recording density, is expected to be used as a multi-media database file to store large amounts of documents or pictures and also as a high-speed backup file. NTT has developed a second-generation optical disk drive, with a recording speed about 10 times faster than the previous ones, and applied it to an Optical Mass Storage System (Optical MSS) with a maximum capacity of 1 TB. The development of such high performance systems is expanding the use of optical disk storage systems. Optical disk storage is expected to play a key role, together with picture compression cording technology, in NTT's future multimedia VI&P communication services. (author abst.)

DESCRIPTORS: optical disk; optical memory; technology development; mass memory; data writing; information storage; database; computer file; multi-media

BROADER DESCRIPTORS: information medium; memory(computer); equipment; research and development; development; data processing; information processing; treatment; storage and accumulation; information media CLASSIFICATION CODE(S): JC04060F

21/5/1 (Item 1 from le: 8)
DIALOG(R)File 8:Ei Compendex(R) (c) 2001 Engineering Info. Inc. All rts. reserv. E.I. No: EIP99094784260 05357768 Title: Disappearing backup window Author: Midgley, Christopher Corporate Source: Network Integrity, Inc, Marlborough, MA, USA Source: Storage Management Solutions v 4 n 4 1999. p 36-39 Publication Year: 1999 CODEN: SMSOFD Language: English Treatment: G; (General Review) Document Type: JA; (Journal Article) Journal Announcement: 9910W4 Abstract: Backup has not evolved at the same pace as everything else in the computing environment. A paradigm shift in the business computing model has occurred with the advent of the Internet, global computing, 24 multiplied by 7 operations, high bandwidth applications, data warehousing, and the NT operating environment. All of these changes require that technologies take new approaches to adapt or totally reengineer today's 'batch backup' solutions, which do not address these evolving application environments. New and innovative backup and data protection architectures will have to address the three major problems, which exist in all traditional solutions, the shrinking backup window, the overhead associated with backup processing, and the age of the data being restored. Descriptors: \*Management information systems; Storage allocation (computer); Data storage equipment; Cost effectiveness; Computer architecture; Real time systems; Wide area networks; Open systems Identifiers: Data protection architectures; Innovations; Open-file backup windows Classification Codes: 723.2 (Data Processing); 722.1 (Data Storage, Equipment & Techniques); 911.2 (Industrial Economics); 722.4 (Digital Computers & Systems) 723 (Computer Software); 722 (Computer Hardware); 911 (Industrial Economics) (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT) 21/5/2 (Item 2 from file: 8) DIALOG(R) File 8: Ei Compendex(R) (c) 2001 Engineering Info. Inc. All rts. reserv. E.I. Monthly No: EI8303019889 E.I. Yearly No: EI83059708 Title: HISTORICAL TRENDS IN PRECIPITATION CHEMISTRY IN EASTERN NORTH AMERICA - 2. Author: Chartier, D. R. Corporate Source: Ont Hydro, Toronto, Can Source: Research Review - Ontario Hydro n 2 May 1981 p 43-48 Publication Year: 1981 CODEN: RROHDS Language: ENGLISH Journal Announcement: 8303 Abstract: As an alternative data analysis to that presented in Part 1 of "Historical Trends in Precipitation Chemistry in Eastern North America ", acidity data for the eastern U. S. were divided into various sub-regions which were analyzed for historical pH trends. The subregional analysis was carried out in order to test the hypothesis forwarded by C. V. Cogbill and G. Likens, that the area of high acidity associated with the northeastern U. S. has intensified and spread to the north, west and south. It was found that in the period from 1955 through 1979, the area effected by the low pH precipitation had expanded into the southeastern U. S.

Descriptors: \*METEOROLOGY--\*Atmospheric Precipitation; CHEMICAL ANALYSIS;

443 (Meteorology); 801 (Chemical Analysis & Physical Chemistry); 451

AIR POLLUTION--Acid Rain Classification Codes:

(Air Pollution)

21/5/3 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

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14051655 PASCAL No.: 99-0241982

# Managing licensed networked electronic resources in a university library WEBB J

Washington State University Libraries, United States

Journal: Information technology and libraries, 1998, 17 (4) 198-206

ISSN: 0730-9295 CODEN: ITLBDC Availability: INIST-13941;

354000073537420030

Document Type: P (Serial) ; A (Analytic) Country of Publication: United States

Note: 1 p.1/4 ref. et notes

Language: English

The issues faced in delivering licensed networked electronic information resources to users have received much attention in university libraries and in the library literature in recent years. Management of those resources has been addressed on many individual topics as well. In key areas such as licensing, access, consortia, and cataloging, for example, issues have been and continue to be explored in some depth. This article presents a holistic view of the management of licensed networked information resources in a university library and suggests areas for further consideration.

English Descriptors: University library; Information management; Electronic information; Licence; Library management; Collection development; Electronic periodical; Subscription; Cooperation; Information access; User interface; Occupational role; Archival storage

French Descriptors: Bibliotheque universitaire; Gestion information; Information electronique; Licence; Gestion bibliotheque; Developpement collection; Periodique electronique; Abonnement; Cooperation; Acces information; Interface utilisateur; Role professionnel; Archivage; Agregateur; Consortium

Classification Codes: 001A01B02B1; 205

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## 21/5/4 (Item 1 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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00607099 00SU07-001

# Electronic vaulting for Windows NT/2000

Holland, Chuck; Midgley, Christopher W

Storage Management Solutions , July 1, 2000 , v5 n4 p14-17, 3 Page(s)

ISSN: 1097-5152

Company Name: Microsoft

Product Name: Microsoft Windows NT; Microsoft Windows 2000

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Discusses implementing an electronic vaulting strategy in Windows NT/2000 sites. States that electronic vaulting services can be purchased as a package from service providers or enterprises can build their own electronic vaulting operations. Relates that the emergence of electronic vaulting services delivers to the Windows market an affordable, Internet-based method of uploading changed data and copying or restoring data to the system in case of a disaster. Mentions the different types of service offered by electronic vaulting providers, with options ranging from

no-cost to high-cost. The discusses a do-it-yourself electronic vaulting strategy, and says that these options allow replication in ealtime over an intranet or the Internet, saving the cost of physical tape transport, training of local personnel, and lost productive system time. (KMD)

Descriptors: Information Storage ; Mass Storage ; Strategy;

Enterprise Computing; Network Management; Disaster Recovery

Identifiers: Microsoft Windows NT; Microsoft Windows 2000; Microsoft

#### 21/5/5 (Item 2 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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00602868 00SU05-002

Disaster recovery planning in the new economy -- Waking to the opportunity of electronic vaulting

Holland, Chuck; Midgley, Cristopher W

Storage Management Solutions , May 1, 2000 , v5 n3 p28-29, 2 Page(s)

ISSN: 1097-5152 Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Focuses on disaster recovery. Says that with 24x7 operations standard, disaster recovery is now an operational imperative that can be supported by new technologies. Adds that new bandwidth offerings combined with Internet-based data centers and revolutionary data replication technologies make protecting data easier and more affordable than ever. States that to appropriately protect their business data in the new economy, Windows NT/2000 professionals must understand the technologies that support recovery planning as well as the steps necessary to implement a sound backup and recovery strategy. Describes the three critical ne technologies that are forever changing the face of disaster rec planning: bigger bandwidth, Internet Data Centers, and byte-level replication technologies.

Descriptors: Disaster Recovery; Bandwidth; Data Communication; Backup; Strategy; Business; Information Storage

# 21/5/6 (Item 3 from file: 233)

DIALOG(R) File 233: Internet & Personal Comp. Abs.

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00540518 99SU07-005

#### The disappearing backup window

Midgley, Christopher

Storage Management Solutions , July 1, 1999 , v4 n4 p36-39, 4 Page(s)

Languages: English

Document Type: Articles, News & Columns.

Geographic Location: United States

Discusses the need for realtime, online backups. Says that all the changes in technology require that technologists take new approaches to adapt, or totally re-engineer, today's `batch backup' solutions that do not address the evolving applications environments. States that new and innovative backup and data protection architectures will have to address the three major problems that exist in all traditional solutions: the shrinking backup window, the overhead associated with backup processing, and the age of the data being restored. Notes that an intelligent data protection architecture is needed to provide the advanced realtime backup solutions that solve these problems. Lists the features to look for in data protection architecture. Concludes that powerful tools which provide backup services and can adapt to business practices, are the essence of emerging backup solutions for the 21st century enterprise. (KMH)

Descriptors: Backup; Software Tools; Application Development; Architecture; Data Warehousing; Business; Enterprise Computing

21/5/7 (Item 1 from le: 35)
DIALOG(R)File 35:Disser ion Abs Online
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867468 ORDER NO: AAD84-21934

INCENTIVES THAT ATTRACT PRINCIPALS TO OVERSEAS EDUCATION AND LEAD TO ORGANIZATIONAL COMMITMENT

Author: HANSEN, TIMOTHY TODD

Degree: PH.D. Year: 1984

Corporate Source/Institution: THE UNIVERSITY OF WISCONSIN - MADISON (

0262)

Source: VOLUME 45/10-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3040. 150 PAGES

Descriptors: EDUCATION, ADMINISTRATION

Descriptor Codes: 0514

The purpose of this study was to examine the relationship between incentives that attract principals to overseas education, demographic variables, and organizational commitment. The theoretical framework for this study was based on previous research involving organizations and incentives, organizational commitment, and organizational recruitment.

Three sets of data were collected from 63 elementary and secondary school principals working in schools affiliated with the Near East/South Asia Council of Overseas Schools. The Overseas Education Incentives Survey was designed and validated in this study to assist in interviewing principals and to identify the degree of influence incentives played in attracting principals to overseas education. Other data included scores from the Organizational Commitment Questionnaire and personal and job-related information from the Demographic Questionnaire. Spearman rank order correlations were used to answer the two major questions in the study. The nonparametric statistical test was used to examine the magnitude of correlations between incentives, demographic variables, and commitment to the organization. Since this was a population study, no level of statistical significance was set.

Findings and Conclusions. (1) Nine of the ten correlations between incentives and organizational commitment were found to be negligible. The most significant relationship was found between the desire to leave education in the United States and the total organizational commitment score (-.37), with an explained variance of 14.0 percent. (2) Little variance in organizational commitment is accounted for by the incentives examined in this study. (3) Nine of the ten correlations between demographic variables and organizational commitment were found to be negligible. The strongest relationship that emerged was years of experience in the present school and organizational commitment with an explained variance of 12.0 percent. (4) Little variance in organizational commitment is accounted for by the demographic variables in this study.

The correlations that emerged in this study illustrate a weak relationship between incentives, demographic variables, and organizational commitment. Based on these conclusions, implications for future research and practice were suggested.

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File 16:Gale Group PROMT 1990-2001/Aug 02 (c) 2001 The Gal Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148: Gale Group Trade & Industry DB 1976-2001/Aug 02
         (c) 2001 The Gale Group
File 621: Gale Group New Prod. Annou. (R) 1985-2001/Aug 02
         (c) 2001 The Gale Group
File 636: Gale Group Newsletter DB(TM) 1987-2001/Aug 02
         (c) 2001 The Gale Group
      88:Gale Group Business A.R.T.S. 1976-2001/Aug 03
File
         (c) 2001 The Gale Group
     47: Gale Group Magazine DB(TM) 1959-2001/Aug 02
File
         (c) 2001 The Gale group
File 275: Gale Group Computer DB(TM) 1983-2001/Aug 01
         (c) 2001 The Gale Group
Set
        Items
                Description
S1
       133073
                 (LONG() TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? -
             OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY?(2W)(DI-
             SK? ? OR DISC? ?)
S2
                (SERVER? OR DATA OR FILE OR FILES) (10N) (BACKUP? OR BACK???-
             () UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR
              SECONDARY)
S3
                 (COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR
       113612
              CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR -
             CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI) (3N)-
             (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
                (COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST???
S4
              OR INDICAT? OR REGISTER? OR MARK??? OR EXAMIN?) (5N) (TIME? OR
             HOUR?? OR MINUTE? ? OR INTERVAL?) OR TIME(3N)SIGNAL???
S5
      4522438
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S6
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             EL? OR AUTOMATION()SYSTEM?)
s7
       742319
                ROBOT? OR CYBERNET? OR AUTOMATE?
S8
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s9
            1
                (S1 OR S2)(S)S3(S)S4(S)S5(S)(S6 OR S7)
           15
S10
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S11
            9
                RD (unique items)
           43
                S1(S)S2(S)(S3 OR S4)(S)(S5 OR S6 OR S7)
S12
S13
           28
                S12 NOT S10
           28
                S13 NOT PY=2000:2001
S14
S15
           14
                RD (unique items)
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11/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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06013154 Supplier Number: 53420581 (USE FORMAT 7 FOR FULLTEXT)

LAN giant does storage -- 3Com senses strong appeal in Storage Area Network market. (StorageConnect line) (Company Business and Marketing)

Medford, Cassimir VARbusiness, p61(1)

Nov 9, 1998

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 1096

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...gradually gained so much momentum in the press and analyst communities that it has grown into an all-out Jihad. But this holy war over mass storage options is being fought almost exclusively on graph paper and among combatants that aren't major players on the industry stage. They don't possess...

...based networking traffic management make up some of the logjam of emerging technologies and architectures with which the market is currently struggling. Is the SAN market ready for prime time in the channel? "At this stage, it's just another product," says Joel Terry, service technician, CSI Data Systems Inc., Norcross, Ga. "The whole business...

...just now getting accepted in the market. I think SAN will have to wait its turn. Right now, it's just another market play with **limited** possibilities." Partnering For Possibility But 3Com does not expect to do it alone. The company will also seek out partnerships with other vendors in an...

...and MTI Technology Corp. as its nonexclusive partners in its first foray into the market. CLARiiON will assist 3Com in developing, testing and marketing a RAID solution that both companies hope will set the standard for networked storage. The solution will include CLARiiON's FC5000 Series full Fibre Channel arrays, Navisphere...

...has been one of the areas of focus for vendors of Fibre Channel and SAN technology—the value proposition being the ability to take network **backup** off the **data** network and put it on the SAN, thus freeing the network from the congestion and restraints imposed by **data backup**. The three companies will work on an interoperable "LAN-Free" Backup solution using SANs. MTI will provide its **RAID** arrays and tape libraries, while Legato will bring backup solutions to the multivendor partnership. Many SAN vendors are lukewarm to 3Com's entry into the...

11/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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05927710 Supplier Number: 53167680 (USE FORMAT 7 FOR FULLTEXT)

Storage: Quantum Announces Industry's First Ultra160/m SCSI Disk Drives for Servers, Workstations, and Storage Subsystems. (Atlas 10K, Atlas IV) (Product Announcement)

EDGE: Work-Group Computing Report, pNA

Nov 2, 1998

Language: English Record Type: Fulltext

Article Type: Product Announcement Document Type: Newsletter; Trade

Word Count: 1317

#### TEXT:

...overall drive value is the top consideration." The Quantum Atlas10K and the Quantum Atlas IV also are among the first hard drives to offer 36GB capacity in a half-height, 3-1/2-inch form factor, as well as 18GB and 9GB capacities in a low-profile, 1-inch-high footprint. Just as significant, both drive families support the advanced data integrity capabilities, blazing bus transfer rate, and...

...of ownership benefit for system OEMs, distributors and resellers, and IT departments alike. They all can invest just once in a drive family with the capacities and features businesses need to reliably manage their data assets now and into the next millennium. "The need for more enterprise storage capacity continues to expand in multiple directions and dimensions. Given the year 2000 problem and other pressures facing IT departments -- along with the doubling of annual capacity -- intelligent data management has become one of the most crucial concerns of IT managers," said John Monroe, Chief Analyst for Rigid Disk Drives at Dataquest...

...products to get the overall data manageability, availability, and fast access they'll need today and tomorrow," he said. "As IT organizations continually add storage capacity to the systems they buy next year, they won't have to upgrade their storage systems to handle intensifying I/O and connectivity requirements. The...

...Interface Choices The Quantum Atlas10K drive family specifically targets businesses' most demanding storage applications -- i.e., those requiring exceptional drive performance as well as high capacities and unsurpassed drive reliability. The Quantum Atlas 10K drives' 10,000 RPM rotation, 5 ms average seek time, and 315 Mb/sec maximum internal transfer rate deliver the lightning-fast data access and sustained data streams critical for data-intensive server, workstation, and storage subsystem applications. They include...

...IV drive family provides outstanding price/performance for a broad spectrum of high-end storage applications that are cost-sensitive, yet still require high drive capacities, excellent performance, and uninterrupted data availability. Besides its 7,200 RPM rotation, the Quantum Atlas IV features a 6.9 ms average seek time, 257 Mb/sec maximum internal transfer rate, and the same rugged reliability as the Quantum Atlas 10K. With the Atlas-class architecture on a cost-effective platform, the Quantum...incorporates several core features of the Ultra3 SCSI specification. Among them are double-edge clocking, which doubles the Ultra2 SCSI bus transfer rate, and cyclical redundancy checking, which delivers exceptional data integrity and reliability of transferred data — especially during hot-plugging operations in RAID environments — for Quantum Atlas users. Another core feature is domain validation, a data management breakthrough that validates the integrity of end users' entire storage network...

...in part from the fully automated manufacturing capabilities of Quantum partner Matsushita-Kotobuki Electronics, Ltd. (MKE), which have long buttressed Quantum's stance as a time -to-market leader in the data storage industry. Manufacturer's suggested retail prices for the new Quantum drives are:

11/3,K/3 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2001 The Gale Group. All rts. reserv.

02579788 Supplier Number: 43425176 (USE FORMAT 7 FOR FULLTEXT)

PRE-COMDEX INTROS SHOW 2 1/2-INCH IS SIZE OF CHOICE: Drive makers eye new technologies

Electronic Engineering Times, pl

Nov 2, 1992

Language: English Record Type: Fulltext

Document Type: Magazine/Janual; Trade

Word Count: 1433

... norm just a few years ago. Today's top spin rate is about 6,300 rpm.

Revving up rpms

Spinning the platter faster reduces the maximum time it takes for data to rotate under the head. At the 7,200-rpm rate, latency is 4.17 ms, compared with 5.56 ms at 5,400 rpm. At 3,600 rpm, latency is 8.45 ms. The 7,200-rpm rate also helps trim average access time to 8 ms.

In the market for 5 1/4-inch drives - which today are used mainly in high-end servers, redundant arrays of inexpensive disk (RAID) subsystems and supercomputers - Seagate has pushed the capacity of its Elite line up to 3 Gbytes. The new drives offer dual porting to speed accessing and have 2 Mbytes of cache, so the...

#### 11/3,K/4 (Item 1 from file: 148)

DIALOG(R) File 148: Gale Group Trade & Industry DB (c) 2001 The Gale Group. All rts. reserv.

10487921 SUPPLIER NUMBER: 21168510 (USE FORMAT 7 OR 9 FOR FULL TEXT)

RAID SUBSYSTEMS. (Technology Information)

Miles, J.b.

Government Computer News, v17, n31, p53(1)

Sept 21, 1998

ISSN: 0738-4300 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 2996 LINE COUNT: 00387

#### TEXT:

...solution to the problem and each systems manager knows it by name: a redundant array of independent disks to call his or her own. Basic RAID has been around for a decade or more, but it's gone through a dozen or so development cycles in that time, making it difficult even for experts to keep up with the changes. Tough choice One thing is for sure: RAID is technology-intensive and usually expensive. Those two factors make it critical to select the right one the first time out-a tough order for systems administrators who lack the time to wade through pages of product literature about competing RAID levels, interface options, redundancy requirements and the best software for the arrays they have in mind. Contrary to popular opinion, the principal purpose of a RAID is not security but data accessibility. Every RAID system is a set of two or more independent disk drives configured by the RAID controller to appear to the host computer as one large-capacity disk drive. Although the host perceives the system as a single drive, the data is distributed across multiple drives. The arrangement provides fault-tolerant storage...

...bottleneck of typical single-drive systems. The payoff to users is 100 percent data availability, regardless of disk failure, plus very fast data retrieval. Is **RAID** worth it? The average starting price of the systems in this guide is \$25,000 and up, depending on configuration. A compensating factor is **RAID** 's low cost per megabyte of storage, which is usually measured in pennies. Peace for pennies Products such as MTI Technology Corp.'s Gladiator 6300...

...fully configured, but their per-megabyte cost for storage can average less than 30 cents. Not bad, considering the peace of mind that comes with RAID . All RAID systems with two or more drives are scalable, but some are more scalable than others. It is on high-end, scalable RAID systems for large workgroups, departments and enterprises or data centers that this Buyers Guide focuses. Such products hold at least two and as many as...

...form factor, although 18.20 3 1/2-inch and 23G 5%-inch drives are coming on fast. Depending on drive size, a single-tower RAID system using 9.IG drives can scale up from 18G to 820 of capacity. Rack-mount systems allow installation of more disk drives than towers do. Many systems, such as Artecon Inc.'s LynxArray 5000, Clariion's Series 3000 and Compaq Computer

Corp.'s StorageWorks RAID Array 7000, allow linking of to r or rack-mount designs in a single architecture that appears are single disk to the host server. Such...

...scalable to an even higher order. LSI Logic Inc.'s MetaStor system has 50G to 1.8T of storage capability. Western Scientific Inc.'s Cyclone RAID Ultra and Winchester Systems Inc.'s FlashDisk RAID arrays can each be scaled up to manage more than IT of storage. All arrays listed can meet storage requirements of typical workgroups--10G to...

... of controllers. Most prices listed are for the minimum configuration available from each vendor. The bottom line is, what you'll pay for a scalable RAID system depends on how you load it. Reason for being The main reason to use a RAID system is to improve data availability in case of a massive disk failure. Purely electronic computer elements such as CPUs, device controllers and network interface cards fail infrequently, if storage systems such as disk arrays are ever. However, mass electro-mechanical devices with a much higher chance of failure. The types, or levels, of **RAID** are nothing more than descriptions of different methods to make data available even if one or more disks on the array fails. The RAID Advisory Board has standardized several RAID levels that determine how multiple drives are connected and how they work together to protect your data. Different RAID levels support different tasks; no superiority of one level over another is implied. RAID 0. At this level, data is split up and striped, distributed evenly, across multiple drives. RAID 0 has very fast data read and write rates, and because no data overhead in the form of parity checking is involved, it provides maximum data storage capability. On the downside, no data redundancy is provided--if even one disk fails, all data is lost. RAID 1. Known as disk mirroring, true redundancy, or avoidance of single points of failure, is provided at this level. A copy of each disk is stored on a separate disk. Data reliability is high because selective multiple drive failures can be overcome. But if corrupt data is written to the original disk, it reappears on others. RAID 1 is dependable and suitable for most storage applications. RAID 0+1. Known as striped mirrored array, this level combines the redundancy of Level 0 with the speed and high storage capacity of Level 1. RAID 3. At this level, all data bytes are striped across all drives, with parity blocks stored on a separate, dedicated drive. The parity bits provide...

...error checking and allow reconstruction in case information has been damaged. Because it involves extra data overhead and the use of an extra parity drive, RAID 3 is more costly than Level 0+1, but it's very dependable and useful for large file transfers. RAID 4. Not as common as RAID 3, this level also uses a separate drive to store panty blocks. It offers very high data read rates, but low write rates, making it useful only for applications where many writes aren't required. RAID 5. At this level, blocks of data and related parity blocks are striped across multiple drives. The write performance limitations of Level 4 are almost eliminated and use of many drives is enabled, making this the most requested of RAID levels. RAID 5 supports virtually all types of applications, including transaction processing demanding high read-write ratios. RAID 6. Also called dual parity, this level of RAID stripes data across multiple drives. At least two levels of parity are striped along with the data or stored on separate drives. RAID 6 provides the highest possible data reliability and fast read and write rates but is costly to implement. RAID 10. Vendorspeak for RAID 0+1. RAID 53. Ditto for RAID Levels 5 plus 3. Implementing RAID makes potentially lost data available if a drive fails, but doesn't protect against potentially fatal system failures such as faulty power supplies, overheated components or massive board failures. For protection against these and other problems, some level of redundancy should be built into your RAID array, especially if it's serving a mission-critical environment. An MTI Technology white paper suggests the following checklist: \* Power supplies. Most high-end RAID arrays offer a standby power supply or some type of load-sharing arrangement under which a backup power supply can meet the system's full power requirements if the first one fails. Many RAID arrays

come with an uninterrupting power supply to provide auxiliary power in case the main power is incrupted. \* Redundant cooling systems. Redundant standby fans will prevent the RAID array from overheating and shutting down if a fan on a tower or rack-mount unit fails. \* Mirrored cache memory. A secondary copy of data should be placed in cache memory to protect against failure of a memory component or array controller. \* Redundant memory battery backup. This is an auxiliary...

...Redundant, or dual, controllers. In mission-critical operations, it's desirable to have a standby controller available in case the primary controller fails. In some RAID designs, the secondary controller provides load balancing, dividing the workload between secondary and main controllers. \* Redundant host interlaces. As with array controllers, it's wise...

...could be a standby or a load balancing design. \* Redundant disk interfaces. This is more backup insurance in case the bus or electronics between the RAID array and any of its disks fails. \* Dual buses. A secondary internal bus can handle information between system controllers, memory and interface boards in case...

...can take over. It can be either a standby or load balancing arrangement. You can avoid the vagaries and expense of field technicians if your RAID comes with warm swap or hot swap capabilities. Older RAID systems had cold swap components— the entire array had to be shut down and powered off before a drive or other component could be replaced...

...activity involving the failed component, but the power needn't be shut down. Hot swap is the best of all the options. A hot swap RAID design lets you remove and change a component while the system is still running. Electrical glitches leading to system hang-ups and data corruption are avoided. Hot spare drives sound the same as hot swaps, but are not. If any drive on a RAID system falls, the information it contains must be rebuilt quickly on the replacement drive, usually via the parity systems built into RAID Levels 0+1, 3 and 5. The system isn't providing full data protection until this happens, and it can take precious hours for it to be fully implemented. In the wings A RAID supporting hot spare or hot standby drives has one or more drives installed and ready to go in case an original drive fails. The data rebuilding begins immediately, reducing the amount of lost time . With one exception, all listed RAID systems use Fast Wide SCSI-2, Ultra SCSI-3 or Fibre Channel connection technologies. IBM Storage System's 7133 Serial Disk System uses IBM's and coaxial connections used in today's advanced network designs. Fibre Channel offers great flexibility for advanced RAID designs because it can be used both by networks and storage systems such as RAID . Nearly half the listed systems use Fibre Channel interfaces, at least as high-speed connections from the arrays to the host servers. The number is up from only a handful less than a year ago, and the upward trend is likely to continue. Add RAID buying tips to your resear \* Get the fastest data pathway between RAID arrays and host servers with Fibre Channel. \* Buy all the scalability you can afford. \* Seek component redundancy for use with missioncritical applications. \* Make full use of remote monitoring and Simple Network Management Protocol software that comes with your RAID subsystem. \* Remember that the smallest capacity drive in each subsystem becomes the default size of the entire set. \* Know that RAID levels have no hierarchy of value.

11/3,K/5 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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05465645 SUPPLIER NUMBER: 11412625 (USE FORMAT 7 OR 9 FOR FULL TEXT)

ODETICS INC. TO UNVEIL AUTOMATED TAPE LIBRARY FOR MAINSTREAM COMPUTER

MARKET

PR Newswire, 1018P4828

Oct 18, 1991

LANGUAGE: ENGLISH REPRO TYPE: FULLTEXT WORD COUNT: 389 LINE OUNT: 00033

product is earning high marks from potential customers that have previewed it. "The ACL5480 features a modular design that allows the user's requirements for capacity and performance to determine system configuration," he said. "No other 3480-compatible automated library features the flexibility offered by this product. Early reports confirm that the ACL5480 fills an emerging need for data backup and archival storage in the midrange computer market. Industry analysts state that this market has ten times the business potential of mainframe computer center libraries."

While the ACL5480 is the first Odetics automated tape library that is designed for 3480 tapes, the...

11/3,K/6 (Item 3 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2001 The Gale Group. All rts. reserv.

05399745 SUPPLIER NUMBER: 10875673 (USE FORMAT 7 OR 9 FOR FULL TEXT) Storage technology: a review of options and their implications for electronic publishing. (also includes list of other storage technologies and a glossary of mass storage terms)

Arnold, Stephen E.

Online, v15, n4, p39(13)

July, 1991

CODEN: ONLID ISSN: 0146-5422 LANGUAGE: ENGLISH RECORD TYPE:

FULLTEXT

WORD COUNT: 10554 LINE COUNT: 00832

- of plastic and aluminum. Data are pressed into the aluminum in a process similar to that used for making records. Diameter is 4.72 inches. Capacity is about 650MB. DASD: Direct Access Storage Device, a dedicated storage subsystem. Usually contains a number of storage devices. DAT: Digital Audio Tape; a high...
- ...than .025 nim allows the medium to be used in cassette tapes, open reel tapes, or disks. A 10 1/2 inch reel has a capacity of 1,000 gigabytes. Disk array: Sometimes referred to as a RAID; a cluster of relatively small disk drives to do the work of a...
- ...Floptical: A "floptical disk drive" is the product of a floppy disk drive and optical technology. A 3 1/2 inch disk yields a formatted capacity of 20.8MB. Form factor. "Computer-speak" for references to the standard external size of drive housings, tape cartridges, etc. jukeboxes: Robotic disk libraries; systems...
- ...of laser and magnetic technology to write data. The read process uses a laser beam. Drives have seek time of 35 to 100 milliseconds as **compared** with 30 **minutes** for tape and 15 to 65 milliseconds for hard disks. Rotational speed is about 1,800 rpms today compared with 3,600 rpm for hard ...
- ...Winchester drives. Management software: This phrase refers to a wide range of software tools necessary to make storage devices operate. Functions the software handles include **backup**, **file** reorganization, and system configuration. Multifunction drives: A synonym for magneto-optical drives; drives use rewriteable optical disk cartridges Nearline storage: Disks or cartridges held in...
- ...Data written and read by coherent light systems (lasers). QIC: Acronym for quarter-inch cartridge; the form factor for the most common magnetic tape format. RAID: Redundant Arrays of Inexpensive Disks; the name came from a University of California, Berkeley research effort, R-DAT-Digital Audio Tape used for archiving of high-capacity computers with SCSI interfaces; a synonym for rotating head technology or helical scan recording techniques. Rewriteable optical drives: A synonym for

magneto-optical drives. These drives allow data to be charged; are typically used as secondary storage devices. SCSI: Small mputer Systems Interface; an interface that allows up to eight devices to be linked to a single controller; features a higher...

11/3,K/7 (Item 4 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c) 2001 The Gale Group. All rts. reserv.

04559562 SUPPLIER NUMBER: 08448138 (USE FORMAT 7 OR 9 FOR FULL TEXT) DataImage, Inc. testing new image-processing product which uses digital audio tape.

PR Newswire, 0517NE001

May 17, 1990

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT WORD COUNT: 483 LINE COUNT: 00039

... Glastonbury, Conn. announced that it has tested the first phase of an application for a Sony "Digital Audio Tape" ("DAT Tape") to be used for mass storage and distribution in conjunction with image-processing systems. The "DAT Tape" can be used to back -up not only optical disks but also ASCII and image files from magnetic disks. Using this technology, the image is scanned, digitized, indexed, and stored onto a "DAT Tape", which uses a 1.2 gigabyte tape...

...customer to retrieve any image within 30 seconds of request, on average. Although, this retrieval time is slower than the 3 to 8 second access time with an optical disk, it compares favorably with an 8-millimeter magnetic tape. The "DAT Tape', which is four millimeters in size, costs less than \$20 per unit and allows a customer to economically store for subsequent retrieval more than 21,000 images per tape. This storage capacity equates to eight rolls of microfilm or 100 plates of microfiche and compares with an optical laser disk which has storage capacity of 6.5 gigabytes or 100,000 images and costs \$360 each.

Robert L. Brasher, president of DataImage stated that "The 'DAT Tape', which is...

11/3,K/8 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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03144749 Supplier Number: 46435482 (USE FORMAT 7 FOR FULLTEXT)
HEWLETT-PACKARD: New HP tape storage system has 8Gb capacity, speed to
62Mb/min

M2 Presswire, pN/A

June 3, 1996

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 724

(USE FORMAT 7 FOR FULLTEXT) TEXT:

M2 PRESSWIRE-3 June 1996-HEWLETT-PACKARD: New HP tape storage system has 8Gb capacity, speed to 62Mb/min (C)1994-96 M2 COMMUNICATIONS LTD RDATE:010696 Hewlett-Packard has announced a tape storage solution that combines Travan minicartridge technology and SCSI-2 performance to deliver up to 8GB capacity and up to 62MB/minute recording speed. The HP Colorado T4000s is designed for workstation-based backup and archival storage for power PC users, workgroups and LANs and is expected to sell at a street price of under 300 pounds. Using Travan TR-4 technology, the HP Colorado T4000s expands minicartridge capacity to 4GB native and 8GB compressed. With its SCSI-2 interface, the T4000s significantly increases backup speed compared to previous minicartridge drives. Its 514 KB/second data - transfer rate is approximately four times faster than floppy-interface systems, providing backup speeds up to 31MB/minute native

and up to 62MB/minute with 2:1 data compression. Using a pical Pentium system, users can back a 1GB hard drive in about 30 nutes. "With workgroups and hard-disk capacities increasing, users are looking for greater backup capacity," said Dave Smith, European Product Manager for HP's Colorado Memory Systems Division, part of HP's Information Storage Group. "What may not be so obvious is the need for higher performance to cut the time it takes to back up and restore data. In the past, high capacity and high speed meant high cost. Now, those advantages are within reach of virtually any PC user." The HP Colorado T4000s is an internal drive...

...3.1 and DOS operating systems; SCSI data cable; mounting screws; manuals; and one pre- formatted TR-4 minicartridge. The system carries a two-year limited warranty and unlimited technical support. An optional HP Colorado brand SCSI-2 controller board is also available. Network support includes Novell NetWare 2.X and...

...sold through a variety of distribution channels under the Colorado and SureStore brand names as well as to OEM customers. In the UK, Hewlett-Packard Limited has 5,000 employees and had a turnover of 1.7 billion pounds in 1995. Winners of the 1995 Queen's award for Export Achievement...

...support. HP has 99,900 employees and had revenue of \$25 billion in its 1994 fiscal year. FACT SHEET HP Colorado T4000s Tape Storage System Capacity: 4GB native (8GB compressed) with QIC-3095 TR-4 minicartridge 2.1GB native (4.2GB compressed) with QIC-3095 Wide minicartridge Interface: SCSI-2 Compatibility...

...80 Wide (HP Colorado T1000/T1000e) and QIC-80 (Jumbo/Trakker 350/250) Performance: Backup speeds up to 62MB/min. MTBF: 150,000 hours Warranty: Limited two year Price: Expected street price of under 300 pounds Availability: 1st June 1996 CONTACT: Karen Widdows, Storage Marketing Manager Tel: +44 (0)1344 365409...

11/3,K/9 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01638779 SUPPLIER NUMBER: 15089541

Hierarchical storage management extends the file system.

Hadden, Tom

NetWare Technical Journal, v2, n2, p25(3)

March-April, 1994

ISSN: 1040-4503 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Hierarchical storage management (HSM) is designed to integrate a network's backup and data protection systems and expand file storage procedures across multiple storage devices, including tape and magneto-optical drives. These systems are becoming more important and complex as networks increase in capacity and users adopt more distributed resources. HMS systems organize data according to frequency of use, and work in cooperation with backup systems toward resource efficiency and data safety. Transparency is also an issue, meaning users can access data on a range of devices as if it were resident on the user's primary medium. Ideally, data should be stored, in storage classes, on the device that best matches the recovery time of that class. HSM systems normally adopt a four-tiered hierarchy that includes on-line, near-line, off-line and archive storage levels.

15/3,K/1 (Item 1 fr file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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06073311 Supplier Number: 53553467 (USE FORMAT 7 FOR FULLTEXT)

Storage: MicroNet Launches Genesis, A Flexible, Fibre Channel-Ready RAID

Storage Solution. (Product Announcement)

EDGE: Work-Group Computing Report, pNA

Jan 11, 1999

Language: English Record Type: Fulltext

Article Type: Product Announcement Document Type: Newsletter; Trade

Word Count: 957

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Genesis, a platform independent, Fibre Channel-ready RAID solution has been announced by MicroNet Technology, Inc. Genesis is a sophisticated and powerful, yet easy-to-manage RAID level 0/1/3/5/0+1 system. Genesis is fully factory pre-configured to meet the specific requirements of each user, with unique features which include redundant RAID controllers for added security, a Web-based GUI for easier system management and a wide variety of available configurations to suit every need. Boasting up to one terabyte of high-availability storage, Genesis delivers the most powerful RAID solution optimized for the mission critical needs of pre-press, video and enterprise markets. A popular Genesis configuration integrates ATTO Technology's dual FibreBridge, allowing...

...995 to \$161,995 SRP. Based on MicroNet's patented and award-winning DataDock technology, Genesis houses up to 28 hard drive modules ranging in capacities from 9 to 36GB each. Genesis is scalable, offering 63GB to one terabyte of storage to meet a wide variety of needs. The system features dual redundant, hot swappable RAID controllers with active-active or active-passive auto failover capability, mirrored cache and battery backup. These features significantly increase data throughput and ensure non-stop operation in the unlikely event of a RAID controller failure. At the center of Genesis is the microprocessor -based ECU (Enhanced Control Unit), which monitors the unit environment including room temperature, system temperature, voltages, fans and power supplies to ensure that they are within specifically defined parameters...

...it can be replaced, and, if the ECU ever fails, operation will not be interrupted. Designed to provide exceptional resilience and fault tolerance, Genesis' redundant RAID controllers support RAID levels 0/1/3/5/0+1 to meet any application requirement. Genesis is kept at a safe and operable temperature with up to fourteen... ...meet the needs of all users, Genesis will also be available as a 7-bay and 14-bay solution. The 7-bay model, with a capacity up to 250GB, is ideal for use in small to medium companies and as a RAID solution to complement Apple's new servers, which are to be introduced at Macworld. The 7-bay GenesisONE ships with a single Ultra LVD SCSI RAID controller, delivering the same functionality as other Genesis models. The 14-bay Genesis, which provides up to 500GB of on-line data can be used within medium to large sized companies whose storage needs are rapidly increasing. It includes dual redundant RAID controllers and the same feature set as Genesis. Genesis will begin shipping in volume on January 17, 1999 and will be available from qualified resellers and VARs. The SRP of Genesis with dual RAID controllers and up to 28, 18GB drive modules for a capacity of over 500GB starts at \$89,995. Genesis, with 28 drive modules and up to one terabyte of storage with two Fibre-Channel host connections will be available for \$161,995. Genesis can also be configured with 14, 18GB drive modules with a capacity up to 500GB for \$45,000 and as a 63GB desktop tower configuration with 7, 9GB drive modules for \$15,995. Based in Irvine, Calif...

DIALOG(R) File 16: Gale G: PROMT(R)
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04805099 Supplier Number: 47070314 (USE FORMAT 7 FOR FULLTEXT)

Storage: nStor introduces Ultra/Wide cluster-ready RAID solution; New CR8e subsystem increases I/O performance

EDGE: Work-Group Computing Report, pN/A

Jan 27, 1997

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 975

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

nStor Corp. Inc. Monday introduced its new high-performance, cluster-ready CR8e RAID subsystem, the first eight bay subsystem to offer transfer data rates of 40MB/sec over an 8-drive Ultra/Wide SCSI-3 bus. The nStor...

- ...in reliability, data integrity, availability, manageability, and alert notification, all of which significantly contribute to a lowering of the total cost of ownership of a RAID subsystem." "nStors design philosophy has always been based on the premise that the life cycle of data is much longer than that of a server," added Paulhus. "nStors server- independent RAID systems are compatible with all popular servers, and are unmatched for ease of use, low life- cycle cost and high availability. And, unlike server-based RAID systems, nStor systems are scaleable so they can grow with the end users network and storage needs." The CR8e is an eight-bay subsystem, available in either a 19" rackmount or tower-based configuration, and is compatible with the nStor AM RAID controller family supporting RAID levels 0, 1, 3, 5, 10 and 50, as well as on-line disk capacity expansion and configuration control designed to lower the cost of ownership and reduce administrator interaction. Key features include: o high-performance Ultra/Wide SCSI-3 architecture supports data transfer speeds up to 40MB/second; o flexible cluster-ready design providing for storage clustering by a PCI RAID controller with failover capability or a multi-host embedded RAID controller; o on-the-fly RAID disk capacity expansion and RAID level migration, allowing the LANadministrator to fine tune network performance without the costly effort of bringing down the server , and backing up and restoring data ; o support for industry-standard hot swappable Single Connector Attached (SCA) disk drives; o redundant active current-sharing hot swappable power supplies, with an expansion...
- ...a third power supply, provides a more reliable and smooth transition of current when changing power supplies, reducing "spikes" and "surges"; o redundant variable-speed, microprocessor controlled, hot swappable cooling fans, designed to reduce overall sound levels and provide adequate cooling for drives up to 10,000 RPM; o cable-less design...
- ...Enclosure (SAF-TE) specification, co-developed by nStor (formerly Conner Storage Systems) and Intel Corp. and endorsed by more than 12 other leading server and RAID controller manufacturers worldwide. Additional information about the SAF-TE specification can be found on the World Wide Web at http://www.safte.org. SAF-TE...
- ...drives with slide mounting rails, two (2) 150 watt hot swappable power supplies, two (2) hot swappable cooling fans, a dual-bus configuration module, and RAID management software. The subsystem supports a variety of operating systems, including Novell NetWare, Windows NT, IBM OS/2 Warp with LAN Server, and SCO UNIX...
- ...Server. Controller options available for the CR8e include a two or three channel Ultra/Wide SCSI-3 Controller with 4MB RAM, or an embedded subsystem RAID Controller. The CR8e subsystem is available for shipment now. Suggested list prices are: o CR8e-340T 12GB Tower Subsystem (3-4GB disk drives) \$11,400...

...Controller \$2,995 nSt Corp. Inc., a wholly owned sub liary of nStor Technologies Inc. (OTC:NST), is a leading supplier of intermation storage solutions, including RAID subsystems, memory products, storage management hardware and software, and digital media management. The company markets its products through a worldwide network of OEMs, distributors, VARs...

15/3,K/3 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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04572065 Supplier Number: 46720852 (USE FORMAT 7 FOR FULLTEXT)
Ultra-SCSI RAID Disk Array Features 9.1 GB, Fast-Wide SCSI, 3.5" drives
News Release, pN/A

Sept 18, 1996

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 518

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Woburn, MA. September 18, 1996.) Winchester Systems Inc. announced a new high capacity series of their FlashDisk RAID disk array products that feature new 9.1 GB FastWide SCSI disk drives in the convenient, half-height, 3.5" format. The FlashDisk RAID array family includes a 45.5 GB desktop array that uses five of the 9.1 GB drives plus 72.8 GB pedestal and rackmount...

...now equipped for Fast-Wide SCSI drives with 68-pin connectors that support the new, doubled, 20 MB per second data transfer rate. The FlashDisk RAID array also supports Ultra-SCSI host interfaces, both single-ended and differential, that deliver up to 40 MB per second sustained host data transfer rate...

...GB of storage, up to 7,700 I/O operations per second and up to 40 MB data throughput per array. This unique combination of capacity, performance and price represents an unparalleled customer value," claims Mr. Joel Leider, the company's chief executive officer. The 40 MB per second host data...

...makes FlashDisk ideal for throughput oriented applications that transfer large quantities of sequential information such as "page and swap" files for multitasking operating systems, web servers, multi-media, imaging, data warehousing, hierarchical storage management, backup and other applications with large file exchanges. Also, the 7,700 per second I/O rate makes FlashDisk ideal for transaction oriented applications including database, OLTP, MRP and other disk intensive...

...SUN Solaris. FlashDisk SCSI is also available for Intel Pentium and Pentium PRO servers plus SGI, MAC, Pentium and Pentium PRO power workstations. Complete FlashDisk RAID systems start at \$19,560 for the desktop unit with a single Ultra-SCSI host port and two 9.1 GB Fast-SCSI disk drives...

15/3,K/4 (Item 4 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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03515988 Supplier Number: 44924750 (USE FORMAT 7 FOR FULLTEXT)
MTI OFFERS TWO ADDITIONS FOR ITS UNIVERSAL STORAGE ARCHITECTURE FOR
MIGRATION TO VMS AND UNIX

Computergram International, n2480, pN/A

August 16, 1994

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 355

(USE FORMAT 7 FOR FULLILAT)

...heterogeneous computing environments and features a dual port architecture that enables two Fast, Wide Small Computer Systems Interface buses to traverse each StorageWare cabinet, offering redundant data paths for greater fault tolerance and performance, says MTI. MTI StorageWare's architecture allows for high availability through redundant dual porting. It also ensures input...

...times as high as 22mS. StingRay NFS connects directly to an Ethernet or Fibre Distributed Data Interface network and supports up to 27Gb in a RAID 4 array, using a single large Write Anywhere File Layout file system that can write to the first available open disk block in the cylinder, eliminating the disk seek latency common to some RAID implementations, says MTI. Entry-level systems with 64Mb cache, seven 2.1Gb disk drives and system software begin at \$39,000. MTI Oasis, claims MTI, is a full-bodied architecture that addresses the needs of a distributed client-server environment by providing centralised administration of the storage resource, automated library robotics, media management, back-up, archive and hierarchical storage. Says MTI, the MTI Oasis provides an enterprise-wide solution to data management by enabling multiple servers and clients to access and manage multiple tape libraries and optical jukeboxes across multiple heterogeneous, networked systems. MTI Oasis prices start at \$8,500 for Unix workgroup back-up.

15/3,K/5 (Item 5 from file: 16)
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02334583 Supplier Number: 43060119 (USE FORMAT 7 FOR FULLTEXT)

IBM & Parallan Partner on Servers

CommunicationsWeek, p23

June 8, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 740

... System/6000 server, the recently announced POWERserver 970, the PS/2 Server 295 boasts dual Micro Channel Architecture buses for faster data transfer and greater capacity. The PS/2 Server 295 includes 12 expansion slots and can transfer 64-bit blocks of data at 200 megabytes per second. The server ships...

...up to 128 megabytes of system memory and 32 megabytes of error correcting code memory designed to detect and avoid errors that can corrupt users'  ${f data}$ .

The server's fault-tolerant features include IBM's Orthogonal Redundant Array of Inexpensive Disk -5 Disk Array/2 software, which manages redundant storage of user data on multiple drives.

IBM has also added to the server the Maximum Availability...

15/3,K/6 (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
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01947401

LONG-TERM LIBRARY AND MASS DATA STORAGE News Release March 17, 1988 p. 1

Comparex has announced an optical storage system for large computer systems with /370 architecture. The 6385 model features a large storage capacity , up to a maximum of 712 gigabytes. The alphanumerical data written onto the optical disk by laser beam, can be stored for at least thirty years. For data centres who currently user magnetic tape units for

long - term libra storage, the new storage dium offers a technologically advanced and cost effective alternation. The Comparex 6385 optical storage system stores alphanumerical data as well as graphics and drawings - coded and uncoded. A high performance control unit, incorporating a microprocessor (68100) forms the central control staion. It is supported by a 4 megabyte buffer storage and an internal memory of 40 megabytes. The fast optical disks provide immediate access to

15/3,K/7 (Item 1 from file: 148)
DIALOG(R) File 148:Gale Group Trade & Industry DB
(c) 2001 The Gale Group. All rts. reserv.

11580199 SUPPLIER NUMBER: 20449151 (USE FORMAT 7 OR 9 FOR FULL TEXT) Redesigning the customer support process for the electronic economy: insights from Storage Dimensions.

El Sawy, Omar A.; Bowles, Gene MIS Quarterly, v21, n4, p457(27)

Dec, 1997

ISSN: 0276-7783 LANGUAGE: English RECORD TYPE: Fulltext; Abstract WORD COUNT: 11903 LINE COUNT: 00989

... detailed information about the company and its products can be found at www.storagedimensions.com.

Storage Dimensions' products fall into three main categories:
high-availability RAID disk storage systems, high capacity tape backup
systems, and network storage management software for multi -server
networks. RAID (Redundant Array of Independent Disks) is a
fault-tolerant disk subsystem architecture that provides protection against
data loss and system interruption and also provides improved data
transfer/access rates for large databases. This protection ranges from
simply mirroring data on duplicate drives to breaking data into
pieces and "striping" it across an array of three or more disks; if one
drive goes down, the controller instantly reconstructs the lost data...

15/3,K/8 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2001 The Gale Group. All rts. reserv.

10882979 SUPPLIER NUMBER: 54116210 (USE FORMAT 7 OR 9 FOR FULL TEXT) Bug's Life management: Pixar's massive asset storage solution for animation features. (Pixar Animation Studios' equipment used to produce an animated film)

Hamit, Francis

Advanced Imaging, 14, 2, 24(2)

Feb, 1999

ISSN: 1042-0711 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1287 LINE COUNT: 00100

... Using RAID to hold all of this definitely worked for Pixar. "We lost disks and we lost controllers," said Brandeau. "We didn't lose any  ${\tt data}$  ."

Further back -up was provided with a robotic "jukebox" tape system that provided incremental back-ups, day by day, working all night long. The workstations used here were SGI Octanes, running between 175...

...to use the Wavefront/Alias software, a solution that Brandeau and other executives at Pixar still find preferable – even now – to other products on the  ${\bf market}$  .

"Rendering time is important," he said. "It's a function of how many pixels there are, and that's a function of height and width. A motion ...

DIALOG(R) File 148: Gale G p Trade & Industry DB (c) 2001 The Gale Group. All rts. reserv.

08124425 SUPPLIER NUMBER: 17389671 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Plastics technology: manufacturing handbook & buyers' guide 1995/96. (Buyers
Guide)

Plastics Technology, v41, n8, pCOV(941)

August, 1995

DOCUMENT TYPE: Buyers Guide ISSN: 0032-1257 LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 174436 LINE COUNT: 15187

slurries up to 4500 lb/hr. Automatic filler unloading from gaylords prevents material loss and ensures clean, dust-free environment. Liquid components received from bulk-storage tanks or drums. Weight-metered components ensure accurate and consistent ratios. Orbital-arm, conical-screw mixer provides efficient mixing. Slurry is automatically transferred to temperature...thermocouples, RTDs, and thermistors. Melt-bolt and springloaded designs, along with accessories such as lead wire, fittings, and connectors.

HARREL, INC.

Three-mode electronic temperature controls include plug-in, single-channel, microprocessor -based models, plus line of multizone units in compact, panel-mounted, 16- and 32-zone modules. Capacity can be extended to any number of zones using remotely mounted, 30-channel auxiliary modules that operate under supervision of panel-mounted unit. For extrusion...

15/3,K/10 (Item 4 from file: 148)
DIALOG(R) File 148:Gale Group Trade & Industry DB
(c) 2001 The Gale Group. All rts. reserv.

06746487 SUPPLIER NUMBER: 14611203 (USE FORMAT 7 OR 9 FOR FULL TEXT)
DG unit ups data recovery. (Data General Corp.'s Series 4000 Tape Array)
(PC Week LABS: Beta Sight) (Hardware Review) (PC Week Netweek) (includes related article on test methodology) (Evaluation)

Mitchell, Eric

PC Week, v10, n43, pN1(2)

Nov 1, 1993

DOCUMENT TYPE: Evaluation ISSN: 0740-1604 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1240 LINE COUNT: 00095

ABSTRACT: Data General Corp's \$19,500 Series 4000 Tape Array tape drive system is powerful and advanced, although it does not offer stellar capacity and users may not manage it easily. The unit uses a tape-array processor based on RAID Level 5 and an array of 4mm drives. The tape-array processor manages data backup itself, instead of the CPU, which makes backup faster. Throughput speeds are fast, except with large numbers of small files. The system's RAID 5 technology ensures fault tolerance for tape failure. Series 4000 is designed well, with good looks and sturdy parts. However, the drive mounts could be more solid. The system has a total possible capacity of 12.6Gbytes, which does not compare well to auto loader tape drives. Also, Series 4000 lacks external management capabilities and external SCSI ID switches...

15/3,K/11 (Item 5 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
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05389183 SUPPLIER NUMBER: 11492424

Texas Microsystems offers fault-tolerant PC: single-processor system offers minicomputerlike disaster recovery. (Product Announcement)
Scannell, Ed
InfoWorld, v13, n46, p36(1)

Nov 18, 1991

DOCUMENT TYPE: Product A uncement

ENGLISH RECORD TYPE: ABSTRACT

ISSN: 0199-6649 LANGUAG

ABSTRACT: Texas Microsystems Inc introduces the Fault Tolerant System Architecture, a single-processor system with many redundant components designed to provide a level of data integrity customarily found on minicomputers. The machine addresses such problems as inconsistent power and damaged data; it uses an enhanced Basic Input/Output System (BIOS) to control interactions between the processor and peripherals. A coprocessor on the SCSI-2 controller board, a disk-cache management scheme and Redundant Array of Inexpensive Disks (RAID) support are also provided. The system accepts up to 64Mbytes of RAM using 4Mbyte SIMM modules and has a VGA controller that supports 1,024 x 768-pixel resolution with 256 colors. SCSI mirrored hard drives with capacities of 120 to 360Mbytes are available. Prices begin at \$6,500.

15/3,K/12 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2001 The Gale Group. All rts. reserv.

03605593 Supplier Number: 47464641 (USE FORMAT 7 FOR FULLTEXT)

NEW RAID BACKUP SOLUTION FROM STREAMLOGIC

Telecomworldwire, pN/A

June 16, 1997

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 196

STREAMLOGIC has introduced its new RAID for tape backup product, StreamArray. The new fault tolerant backup solution incorporates DLT technology with StreamLogic's microprocessor controlled enclosure and tape backup array software from Cheyenne. The StreamArray DLT offers system backup and data recovery capabilities for Windows NT, IntranetWare, NetWare or Intranet servers. The new solution features a capacity of up to 160Gb, with backup speeds up to 32Gb/hr and restore search speeds of up to 40,000 files per second. The StreamArray comes with up to 4 drives per array and increases the number of drives in the array as performance and capacity are increased to reduce backup time. The StreamArray is capable of backing up a single server, several servers or multiple databases at once and offers multiple levels of fault tolerance with up to four hot pluggable DLT mechanisms. StreamLogic's enclosure also supports...

15/3,K/13 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2001 The Gale Group. All rts. reserv.

04092779 SUPPLIER NUMBER: 18873226

Soup up your server. (identifying bottlenecks to enhance performance of AppleShare servers) (Technology Tutorial) (Tutorial)

Wiseth, Kelli

MacUser, v13, n1, p119(5)

Jan, 1997

DOCUMENT TYPE: Tutorial ISSN: 0884-0997 LANGUAGE: English

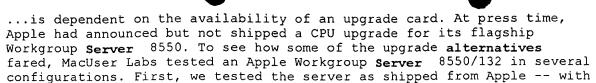
RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2883 LINE COUNT: 00220

# TEXT:

...finding out whether your server is overutilized. You can monitor file and folder operations, such as deleting, opening, and renaming files and folders. Even Server Manager doesn't distinguish among CPU, NIC (network interface card), ...calls and which client is making them.) If Server Manager turns up a heavily loaded server and if network utilization seems to be within reasonable limits, it's time to consider upgrading the server. There are three sorts of components you may want to upgrade: NICs,

24 MB of RAM and a 2-GB internal Seagate...



...server is far from an exact science (see the "Server-Upgrade Tests" figure). NICkle and Diming It If you've segmented your Ethernet network to limit competition among users for access to network resources, you've probably been frustrated that server access is still slow for some (or all) users. Since...

...to users. Drive-based bottlenecks are not usually the primary cause of server slowdowns, but an underpowered storage system can contribute to sluggishness. Installing a RAID (redundant array of inexpensive disks) system -- which combines multiple drives in order to provide one logical disk volume -- can speed up drive I/O by splitting reads and writes across multiple physical surfaces at the same time. Apple ships RAID software with all its servers, and we decided to see if this "free" solution could buy us anything. With the original 24 MB of RAM in the server, we added a second 2-GB Seagate drive and configured the server for RAID 0, using Apple's AppleRAID software. Since the Workgroup Server 8550 has two SCSI buses -- an external bus that operates at 5 MB per second...

...disappointing. At server loads of 32 and fewer clients, the throughput was less than it was with the baseline system. Unless your main interest in RAID is the consolidation of several drives to give you one large volume, there's little benefit in using AppleRAID's RAID 0 configuration. We decided to raise the stakes by testing a more powerful RAID setup, a StreamLogic SledgeHammer 8200 PCI Wide 8-GB disk array. The SledgeHammer consists of a PCI card and an external box containing two 4...

...load, the point at which the baseline system's performance began to taper off. Unlike adding a few extra megabytes of RAM, buying a speedy RAID system will cost you a pretty penny: The SledgeHammer sells for \$3,799. Working in the Kitchen Mindful that our test results had been mixed

...Our final series of tests, affectionately dubbed "the kitchen sink" by our testing team, involved adding four NICs, 64 MB of RAM, and the StreamLogic RAID system. The kitchen-sink test platform fared far better than any other server configuration. Even with 60 clients, NetBench reported no dropped clients. With 36...

...setting and clearing the AppleShare cache) but goes further. The Monitor & Control window's activity pane shows current server utilization, averaged over time, and the maximum activity during the period shown. WE USED THE ZIFF-DAVIS server benchmark test, NetBench 5.0, to evaluate several upgrade options on an Apple Workgroup...

...configurations. For example, the server configuration we used for our "kitchen sink" test, in which we added four NICs, extra RAM, and a high-speed RAID disk array, can probably support more users than an unenhanced server -- but the exact number will depend on your situation.

15/3,K/14 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01410320 SUPPLIER NUMBER: 11225851

Sea of change underway for storage solutions. (data protection and storage management) (Special Report)

Interland, Peter J.

LAN Times, v8, n17, p52(4)

Sept 2, 1991 ISSN: 1040-5917

LANGUAGE: ENGLISH

RECORD TYPE: A PRACT

ABSTRACT: Changes in backup and archival processes include the development of storage servers employing hierarchical management expert systems and automated robotic stackers and jukeboxes. Storage tape dominates the offline archival market with quarter inch cartridges holding up to 1.3Gbytes, digital audio tape holding between one and 2Gbytes, and 8mm Exabyte products holding between 2...

...up to 40Gbytes of 'near-line' storage. Array technology gives optimized request management with eight hard drives working with a 32-bit EISA array controller. Managing storage requires a dedicated CPU storage server automatically managing storage. The future ideal is automatic archival and backup on appropriate media in a distributed system.

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File 15:ABI/Inform(R) 1 2001/Aug 03 (c) 2001 ProQues Info&Learning
File 98:General Sci Abs/Full-Text 1984-2001/Jun
         (c) 2001 The HW Wilson Co.
File 674: Computer News Fulltext 1989-2001/Jul W2
         (c) 2001 IDG Communications
File 624:McGraw-Hill Publications 1985-2001/Jul 31
         (c) 2001 McGraw-Hill Co. Inc
       9:Business & Industry(R) Jul/1994-2001/Aug 02
File
         (c) 2001 Resp. DB Svcs.
File 75:TGG Management Contents(R) 86-2001/Jul W4
         (c) 2001 The Gale Group
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 612: Japan Economic Newswire (TM) 1984-2001/Aug 03
         (c) 2001 Kyodo News
File 635: Business Dateline(R) 1985-2001/Aug 03
         (c) 2001 ProQuest Info&Learning
File 484: Periodical Abs Plustext 1986-2001/Jul W5
         (c) 2001 ProQuest
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         (c) 2001 CMP
File 623: Business Week 1985-2001/Jul W5
         (c) 2001 The McGraw-Hill Companies Inc
      20:World Reporter 1997-2001/Aug 03
         (c) 2001 The Dialog Corporation
Set
        Items
                Description
                (LONG() TERM OR PERMANENT OR ARCHIV? OR MASS) (5N) (STORAGE? -
S1
       136170
             OR MEMORY OR MEMORIES) OR RAID? ? OR REDUNDANT()ARRAY?(2W)(DI-
             SK? ? OR DISC? ?)
                (SERVER? OR DATA OR FILE OR FILES) (5N) (BACKUP? OR BACK???(-
S2
        70447
             )UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR REPLACEMENT? OR
             SECONDARY)
s3
        43369
                (COORDINAT? OR CO()ORDINAT? OR CONTROL? ? OR CONTROLLING OR
              CONTROLLED OR MANAG? OR INTEGRAT?) (5N) (PROCESSOR? OR CPU OR -
             CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR MULTI)(3N)-
             (DATA OR STORAGE OR ELEMENT? ? OR DRIVE? ?))
S4
       560346
                (COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST???
              OR INDICAT? OR REGISTER? OR MARK? ? OR MARKED OR MARKING OR -
             EXAMIN?) (5N) (TIME? OR HOUR?? OR MINUTE? ? OR INTERVAL?) OR T-
             IME(3N)SIGNAL???
S5
      3878934
                CAPACIT? OR LIMIT? OR MAXIMUM?
                (TAPE? OR CARTRIDGE?) (5N) (COLLECTION? OR LIBRAR? OR CAROUS-
S6
        11299
             EL? OR AUTOMATION()SYSTEM?)
s7
       422518
                ROBOT? OR CYBERNET? OR AUTOMATE?
S8
                S1(S)S2(S)S3(S)S4(S)S5(S)(S6 OR S7)
            0
                (S1 OR S2)(S)S3(S)S4(S)S5(S)(S6 OR S7)
S9
            0
S10
            4
                S1(S)S2(S)S4(S)S5
S11
            4
                RD (unique items)
S12
           17
                S1(S)S2(S)(S3 OR S4)(S)(S5 OR S6 OR S7)
S13
           13
                S12 NOT S11
S14
           13
                RD (unique items)
```

11/3,K/1 (Item 1 frefile: 15)
PIALOG(R)File 15:ABI/Inim(R)

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00432163 89-03950

Irwin Model 5080 Has Twice the Storage of Competitors

Susco, Kevin

InfoWorld v10n49 PP: 87-88 Dec 5, 1988

ISSN: 0199-6649 JRNL CODE: IFW

ABSTRACT: Irwin Magnetic Systems Inc.'s (Ann Arbor, Michigan) mass storage system, Tape Backup 5080, stores 80 megabytes of data on a single, removable DC 2000 minicartridge. Any Macintosh computer with a Small Computer Systems Interface port and one megabyte of memory can be supported by the 5080 and its accompanying software -- EZ Tape. The 5080's extra capacity is its distinguishing feature. Irwin's own tape format is used in the 5080. That format utilizes servo tracks, which is a floppy disk recording technique that writes special marks onto the tape at specific intervals to tell the read-write head where to look for the data tracks. By using the EZ Tape program, users can: 1. back up all files from a hard disk, 2. back up only changed files, 3. restore all files from a tape cartridge, or 4. select particular files to back up or restore. Irwin's reliability is rated only as satisfactory because using any tape on the 5080, as suggested by the documentation, leads to unreliable...

11/3,K/2 (Item 1 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2001 IDG Communications. All rts. reserv.

062778

Sybase tackles an IS balancing act

Buyer's Guide: Product Review, Adaptive Server 11.5

Client/Server Labs test shows DBMS handles quirky workloads

Byline: Steve Antonoff

Journal: Computerworld Page Number: 88

Publication Date: October 27, 1997
Word Count: 1501 Line Count: 137

#### Text:

... placing orders, but management doesn't want to wait forever for data about what's happening right now - not last night or yesterday. Information replication - duplicating data on multiple servers - has been the accepted solution. While still supporting this, Sybase Adaptive Server attempts to provide an alternative: a server that can adjust itself to the changing environment. Add parallel processing and a set of well-thought-out and well-implemented graphical tools, and you...

- ... application be written to make use of parallel processing. Another important feature of Adaptive Server 11.5 is Recovery Fault Isolation. That lets the DBMS limit hardware I/O problems to a page rather than to an entire table or database. Once a bad page is marked, the rest of the...
- ... using the SQL Advantage utility Sybase's SQL command graphical user interface (GUI). Or it could be a major undertaking using backups. Modern disk technology RAID, mirroring and so forth can insulate the DBMS from I/O failures. But even with such technology in place, knowing that only a small portion...
- ... of Adaptive Server, parallel processing and Recovery Fault Isolation weren't used at all. Sybase Central was used to establish LPM objects but, in the **limited** scope of this evaluation, the real-world effects of LPM weren't measured. Installation and Tools Installing Adaptive Server 11.5 from CD-ROM was...
- ... about nine minutes. Installation time on an eight-CPU, 200-MHz Pentium

Pro server with SCSI2 dress was comparable. The installation routine used one CPU, indicating is single-threaded. The time required to install Adaptive Server is comparable to Microsoft Corp.'s SQL Server. A reboot is required to ensure that all installed DLLs are available...Server expected. The first was a setting, the second a disagreement in the parameters specified for a stored procedure. Adaptive Server installed itself with a maximum of 10 devices. That seems rather low but was easy to change with the sp...

...configure stored procedure. Increasing the **limit** to 50 devices allowed the script to create all the database devices. Then a discrepancy between the Microsoft sp...

11/3,K/3 (Item 1 from file: 20)
DIALOG(R)File 20:World Reporter
(c) 2001 The Dialog Corporation. All rts. reserv.

03081633

Procom to Showcase Full Line of Network- Attach Storage Solutions At Networld+Interop '98 in Atlanta; Will Unveil Several New Products
BUSINESS WIRE

October 12, 1998

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 705

... and-play to the extreme. The company's other product lines being shown at Networld+Interop include: NetFORCE 1000 NetFORCE 1000 is a revolutionary high- capacity, enterprise-class shared storage system. It offers a direct network attach, high performance, high availability and an easy-to-install data-access storage solution for...

... the few AIT arrays and the world's fastest tape backup and recovery system. With a 20 megabyte- per-second data-transfer rate and a capacity of 200 gigabytes, this new line of enterprise-class tape products is the perfect backup and restoration solution for corporate data, offering high availability, capacity and performance. About Procom Irvine-based Procom Technology manufactures intelligent network storage solutions from CD-ROM and DVD-ROM arrays to RAID and tape storage systems, as well as hard-drive upgrades for notebooks, PCs and servers. In particular, Procom is the world's largest manufacturer of...

11/3,K/4 (Item 2 from file: 20)
DIALOG(R)File 20:World Reporter
(c) 2001 The Dialog Corporation. All rts. reserv.

01225601 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Mobile Computing Trends Foretell Opportunities For Mass Storage Upgrades; CMS Peripherals Overcomes Intimidation Factors With Easy to Install, Safe, Time-Saver Upgrade Solutions

BUSINESS WIRE

March 24, 1998 11:48

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 784

...for cable fractures, misaligned or broken connectors, electrostatic discharge damage, or voiding the manufacturer's warranty. Direct transfer kits simplify and accelerate the copying of data to the replacement drive. The entire upgrade process takes less than 25 minutes. "We're fully committed to the proposition that notebook computer shipments are reaching critical mass with a serious shortcoming in mass storage," Burke said. "We are already on top of the immediate needs, but more important to our future is all of the innovative ideas that are...

( 14/3,K/1 (Item 1 free file: 15)
DIALOG(R)File 15:ABI/Inform(R)

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01555458 02-06447

Redesigning the customer support process for the electronic economy: Insights from storage dimensions

El Sawy, Omar A; Bowles, Gene

MIS Quarterly v21n4 PP: 457-483 Dec 1997

ISSN: 0276-7783 JRNL CODE: MIS

WORD COUNT: 11027

...TEXT: detailed information about the company and its products can be found at www.storagedimensions.com.

products fall Dimensions' into three main categories: high-availability RAID disk storage systems, high capacity tape backup systems, and network storage management software for multi -server Array of Independent Disks ) is a networks. RAID (Redundant fault-tolerant disk subsystem architecture that provides protection against loss and system interruption and also provides improved data transfer/access rates for large databases. This protection ranges from simply mirroring data on duplicate drives to breaking data into pieces and "striping" it across an array of three or more disks; if one drive goes down, the controller instantly reconstructs the lost data...

14/3,K/2 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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01500293 01-51281

Capitalizing on I2O innovation

Shah, Shishir

Computer Technology Review v17n8 PP: 42-43 Aug 1997

ISSN: 0278-9647 JRNL CODE: CTN

WORD COUNT: 1199

...TEXT: very crucial. The bus interface device must be capable of handling all protocol-related issues without any IOP CPU intervention. This will offload the IOP CPU from managing multiple I/O threads and generate a maximum of a single interrupt per I/O. When an I sub 2 O-RAID application is designed using these components, selection of an intelligent SCSI processor becomes even more critical. RAID applications need to manage the data caches, redundancy, load-balancing schemes and other RAID algorithms which are CPU-intensive.

The first major beneficiary of I sub 2 O may be I sub 2 O-RAID applications. Today, RAID vendors...

14/3,K/3 (Item 3 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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00481176 90-06933

Systems-Managed Storage Migrates to PC LANs

Brown, Tom

Computer Technology Review v9n15 PP: 18, 24-26 Dec 1989

ISSN: 0278-9647 JRNL CODE: CTN

...ABSTRACT: LAN) as a solution to increasingly difficult resource management challenges and skyrocketing data storage requirements. With systems-managed storage, the computer systems themselves coordinate and automate data storage - from data backup and archival storage to managing multiple peripheral devices and the total network data

library. Several basic reas are encompassed by system anaged storage. However, there is no true systems-managed storage...

... levels in the systems-managed storage hierarchy: 1. the common logical-level file format and user interface, 2. centralized multiuser backup services, 3. distributed multiuser **backup** services, and 4. system-wide **file** management services. New opportunities will emerge for network users once a systems-managed storage standard has been established.

(Item 1 from file: 674) 14/3,K/4 DIALOG(R) File 674: Computer News Fulltext (c) 2001 IDG Communications. All rts. reserv.

063078

Tape storage put to new enterprise uses Faster technology key to data access

Byline: Tim Ouellette

Journal: Computerworld Page Number: 61

Publication Date: November 10, 1997 Word Count: 476 Line Count: 44

Text:

Tape storage is moving beyond backup . Users have long dumped corporate over the wall from disk subsystems into tape archives. But faster technology is giving them a chance to use tape as an integral piece of...

... of volume the Pearl River, N.Y., insurance company deals with: collecting 1.2 billion insurance records per year, maintaining at least 5.5 billion records online at any given time, holding data anywhere from five to 22 years and handling between 200,000 and 500,000 downloads per month. The company is able to use...

...subsystem. That compares with prices of less than \$20,000 for newer tape systems today. "High-accessibility tape is a solid choice for near-online storage applications such as imaging, document archive, video and CAD/CAM," said Michael Peterson, president of Strategic Research, in a recent report. According to International Data Corp. in Framingham, Mass ., Storage Technology Corp. has improved high-end 36-track performance with faster controllers, libraries and improved tape -handling techniques. It also is planning support for Fibre Channel interconnects, which is important for users beginning to build separate, high-speed storage networks outside the corporate network. And IBM's new Magstar MP 3575 Tape Libraries promise 2.2M byte/sec. response times for native data or 6.6M byte/sec. for compressed data. The midrange tape are targeted at mixed server - Unix and Windows NT - environments in the data center. That's because open systems servers are requiring tape resources as...

14/3,K/5 (Item 2 from file: 674) DIALOG(R) File 674: Computer News Fulltext (c) 2001 IDG Communications. All rts. reserv.

042166

Server searching: a game of break the bottleneck

Buyers Guide

Byline: Tony Croes and Josh Penrod

Journal: Network World Page Number: 33

Publication Date: January 30, 1995 Word Count: 4491 Line Count: 423

Server seekers take heart. Limiting your search for network servers to only those that offer unique tricks to overcome common performance bottlenecks will ease your selection process. Hunting for bottleneck...

... is essentially a market of their own, with selection riteria that is vastly different from PC-based servers. These very high-end servers support a limited and often proprietary set of operating systems and uniquely designed processors, and carry price tags in excess of \$500,000. For many users, PC-based...

...on superserver class machines. These servers also have bus architectures designed to maximize concurrency, sophisticated cache designs and numerous fault-tolerant features designed to provide maximum server availability. Prevalent high-end features include error checking and correcting (ECC) memory, which maintains the integrity of data in random-access memory and stored on disk; components that can be swapped without bringing down the server; intelligent drive controllers; and redundant subsystems. High-end servers range from \$11,000 to more than \$100,000. Mid-range servers offer high availability, manageability and performance at a more moderate price of between \$4,000 and \$16,000. These servers typically have large storage and memory capacities, as well as segmented bus architectures. Support for multiprocessing, ECC memory and other fault-tolerant features often cost more. At the low end, a new...drive array controllers. As with processors, an obvious way to improve drive performance is to use faster drives. In general, with each increase in drive capacity comes a corresponding increase in drive performance. In systems with a single disk, this logic is valid. However, the number of disk drives in the...

... 1G-byte or 2G-byte drive, even when the speed of the individual 1G-byte or 2G-byte drive is marginally faster than the smaller capacity drives. The results of empirical testing by Compaq's Systems Division back up this contention (see graphic). Almost without exception, Fast SCSI-2 is the... ... in a bus promoting high levels of concurrency. These controllers typically support more than one disk channel per bus interface and implement support for multiple Redundant Array of Inexpensive Disks (RAID ) levels in hardware. Implementing RAID in hardware instead of software removes the burden of parity and striping calculations from the host CPU and allows the controller to manage the distribution of data writes evenly across the array of drives. Several vendors offer hardware-based RAID (see graphic, page 36). There is room for differentiation among disk array controllers from different vendors. Tricord, for example, contends its use of I/O...

... differentiating features. hen data from the CPU is destined for a network port instead of a disk, it can cause a slightly different bottleneck and limit the number of users that can simultaneously make server requests. In applications where the net is the primary bottleneck - such as file and print services...of fault-tolerant features to look for, including automatic server restart after a system failure, automatic drive monitoring and drive repair, parity checks across internal data paths, hot spares and redundancy, as well as load balancing and redundancy capabilities across NICs. Having the hardware is only part of the solution. Overall server manageability and availability depends... 23, page 1). Typically, eliminating one bottleneck leads to the creation of another in a different area. You've got to smash each bottleneck until maximum performance is achieved. And the support that a vendor offers can be a good source of information in helping to crash the bottlenecks. Croes and...

14/3,K/6 (Item 3 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
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040958

Sentinel Systems makes its move into superserver market Maximum Strategy, NetFRAME, Compaq also air new servers.

Byline: Margaret Dornbusch

Journal: Network World Page Number: 29

Publication Date: November 21, 1994

Word Count: 522 Lim Count: 51

#### Text:

Start-up Sentinel Systems, Inc. last week announced its foray into the superserver market, while storage company Maximum Strategy, Inc. rolled out its first file server. Veteran server companies NetFRAME Systems, Inc. and Compaq Computer Corp. separately beefed up their product lines, as...

... bytes of cache memory, 16M bytes of bus-resident random-access memory expandable to 512M bytes, and a 400M-byte SCSI fixed disk drive. The redundant systems process data simultaneously, compare results and correct any soft errors automatically. If a hard error is detected, the failing component is taken off-line automatically. MAXIMUM IMPACT Maximum Strategy's new file servers, the ProFile XL and ProFile L, provide Network File System-based file services for computer-aided design and other processing-intensive applications. The ProFile XL provides up to 376G bytes of storage with RAID Level 5 protection and an aggregate file transfer rate of 50M bytes/sec. The ProFile XL can be configured with up to four independent network...

... Motorola 68060 CPUs and can access metadata (file identifier information) from cache for up to 60,000 of the most recently accessed files. The second CPU manages data storage and retrieval operations, and sets up all high-speed data transfers. Should either CPU fail, the other CPU will take over. The ProFile...

... NetWare networks running multiple NetWare Loadable Modules and Virtual Loadable Modules, but also supports Windows NT, OS/2 and SCO Unix. Compaq: (800) 888-5858; Maximum Strategy: (408) 383-1600; NetFRAME: (408) 944-0600; Sentinel Systems: (215) 830-1900.

14/3,K/7 (Item 1 from file: 635)
DIALOG(R)File 635:Business Dateline(R)
(c) 2001 ProQuest Info&Learning. All rts. reserv.

0430471 93-82788

Storage Dimensions introduces LANStor RAIDMaster RAID 5 software for Netware

Enos, Randy

Business Wire (San Francisco, CA, US) s1 p1

PUBL DATE: 930913 WORD COUNT: 1,485

DATELINE: Milpitas, CA, US

## TEXT:

...throughput, five to eight times faster array rebuild times, up to 65% lower CPU utilization, and the critical storage management capabilities not available with other RAID 5 software products," said Dale Head, Storage Dimensions director of software marketing. "Network managers that choose mirroring for their fault-tolerant storage solution are losing 50% of their total capacity to data redundancy overhead. By simply installing LANStor RAIDMaster on any group of three or more SCSI drives, network managers can maximize the use of their hardware and increase total user available capacity while maintaining fault tolerance."

With the addition of LANStor RAIDMaster RAID 5 software, Storage Dimensions now offers the industry's broadest line of fault-tolerant...

14/3,K/8 (Item 2 from file: 635)
DIALOG(R)File 635:Business Dateline(R)
(c) 2001 ProQuest Info&Learning. All rts. reserv.

0250522 91-74491

Wang Laboratories Selects Archive Python DAT Drive for VS Product Lines and First ETSA-Compatible System

Harris, Michael W.; Kenn, Susan Business Wire (San Franceso, CA, US) sl pl

PUBL DATE: 911105 WORD COUNT: 476

DATELINE: Costa Mesa, CA, US

#### TEXT:

...line manager. "The Archive Python DAT drive performed extremely well in all our tests and we believe it will provide our users with exceptional high-capacity storage capabilities."

The 2 gigabyte **Archive** Python DAT drive incorporates a compact 3-1/2-inch mechanism in a standard 5-1/4-inch form-factor. The True Computer Grade DAT...

14/3,K/9 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2001 CMP. All rts. reserv.

01021258 CMP ACCESSION NUMBER: NWC19940701S0976
Consolidate Your NetWare File Servers (File Servers)
Shane R. Yamkowy
NETWORK COMPUTING, 1994, n 508 , 141
PUBLICATION DATE: 940701

JOURNAL CODE: NWC LANGUAGE: English

RECORD TYPE: Fulltext SECTION HEADING: Hands-On

#### TEXT:

will make the NDS visible. Hard Drive Questions We added up the current hard drive space on the existing servers, assuming this should be the maximum necessary to start, and then added 50 percent for expansion. Then we thought about how much data protection we wanted on the hard drives. We considered RAID 0, 1, 4 and 5, but focused primarily on RAID 1 (mirroring) and RAID 5 (data and error protection striping). We decided to use RAID 5 since our projected hard drive capacity was about 12 GB. To buy twice as much hard drive and mirror the volumes seemed like a waste of money, considering the low occurrence of hard drive failures and knowing RAID 5 protects us against any single drive failing. We thought the 93 percent usage provided by the Compaq Smart SCSI controller was a much more cost-effective approach. RAID 5 also provides increased performance on reads and writes. The more hard drives you have, the more simultaneous reads and writes you can execute, as...

...but when we started up NetWare, the volume appeared to be corrupted. Recovering from the problem reminded us that to expand a NetWare volume using RAID 5 means you have to destroy the volume, add the new hard drive(s), and then recreate the volume and put the data back. As a result, we decided to buy the maximum number of hard drives (14), giving us 28 GB. Two GB go to data protection, and 1GB goes to the system volume, leaving our users with 25 GB for data. If we need to add any more drives, we will buy a second RAID controller and add drives as a new volume, rather than go through the pain of destroying the current volume and rebuilding it with the additional...

...to be working and we are prepared for expansion. Rev the Engine Next, we had to choose the CPU or "engine" for the superserver. The CPU does three main jobs: It manages client requests to and from the network cards, runs NetWare Loadable Modules (NLMs) and manages input/output (I/O) requests from the hard drive system. You can reduce the CPU 's work managing the hard drive system by using a RAID controller with a RISC CPU on-board to do the work instead. Our Compaq controller came with one. In the past, our separate file server...Compaq uninterruptible power supply, an internal modem and Insight Manager from Compaq, which monitors more than 100 different operating parameters and logs them for you.

Backup Server When you consolidate, your backup requirements will change, especially if you are running backups from multiple servers. that are about to be consolidated. We strongly recommend that you build a small, separate NetWare file server that is only used for backups in essence, a backup server. This eliminates the chance that the backup software will take down your production server, and you can use the backup server to rebuild quickly any production server that goes down. As your network grows above the 10-GB mark, we strongly recommend you consider a tape exchanger for backups. These self-contained units are composed of one or two tape drives, a robotic arm and a tape cartridge holding 12 to 15 tapes. This allows lots of capacity to get backups done without changing tapes manually. The multiple tape drives reduce backup time by doing simultaneous backups, and you can make copies of...

14/3,K/10 (Item 1 from file: 20)

DIALOG(R) File 20:World Reporter

(c) 2001 The Dialog Corporation. All rts. reserv.

04929911 (USE FORMAT 7 OR 9 FOR FULLTEXT)

HighGround Systems Provides Removable Storage Management Component of Windows 2000

BUSINESS WIRE April 12, 1999

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 664

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... programming interfaces for managing tape, optical, and CD-ROM robotic libraries, drives and media. It also enables multiple data management applications (e.g. backup/recovery, archive, hierarchical storage management, document imaging) to share the same tape, CD-ROM, or optical library.

With the Windows 2000-based Removable Storage Management service, system administrators will be able to:

-- Increase Windows 2000 scalability and data and application availability through...

14/3,K/11 (Item 2 from file: 20)

DIALOG(R) File 20:World Reporter

(c) 2001 The Dialog Corporation. All rts. reserv.

03922301 (USE FORMAT 7 OR 9 FOR FULLTEXT)

MicroNet Launches Genesis, A Flexible, Fibre Channel-Ready RAID Storage Solution

BUSINESS WIRE

January 05, 1999

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1101

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... significantly increase data throughput and ensure non-stop operation in the unlikely event of a RAID controller failure. At the center of Genesis is the **microprocessor** -based ECU (Enhanced Control Unit), which monitors the unit environment including room temperature, system temperature, voltages, fans and power supplies to ensure that they are within specifically defined parameters...

14/3,K/12 (Item 3 from file: 20)

DIALOG(R) File 20:World Reporter

(c) 2001 The Dialog Corporation. All rts. reserv.

# Solid Data Systems Andrinces The World's Fastest Solid State Storage System; Excellerator Itra Delivers a Data Access Time of Only 14 Microseconds

BUSINESS WIRE October 13, 1998

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1187

... loss. The Data Retention system provides integral battery backup; an on-board disk drive with a separate data path that is independent of the host CPU; automatic backup control logic; RAIC (redundant array of independent chips); and redundant power supplies. Solid Data Systems backs its exceptional product quality with a one-year return-to-factory warranty and business-hour telephone support. Optional support services are available including...

# 14/3,K/13 (Item 4 from file: 20)

DIALOG(R) File 20:World Reporter

(c) 2001 The Dialog Corporation. All rts. reserv.

01443892 (USE FORMAT 7 OR 9 FOR FULLTEXT)

# Cygnet Introduces First DVD-RAM Jukebox; Cygnet's Modular Infinidisc Is Now Integrated With Hitachi's DVD-RAM Drive

BUSINESS WIRE

April 22, 1998 11:29

JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 664

...MByte which makes the Infinidisc(TM) the ideal storage solution for applications that have been anxiously awaiting DVD-RAM technology, such as document archival, network **server file backup** and multimedia storage." The Hitachi GF-1050 is a 5.25-in. half-height DVD-RAM drive with a fast SCSI-2 interface, providing a **maximum** data transfer rate of 10 MBytes/second. It performs both recording and reading at a sustained transfer rate of 1.38 MBytes/second with an...

... senior director of marketing for optical storage products at Hitachi America, Ltd. "The GF-1050 DVD-RAM, SCSI interface drive is a fully rewritable, high-capacity random access storage technology which, coupled with UDF file format, enables CD/DVD jukeboxes like the Infinidisc(TM) to compete vigorously with optical jukeboxes based...

...third quarter of 1998. Cygnet Storage Solutions, Inc. is proud to be the choice provider of an increasingly wide array of CD/DVD storage and automated recording solutions, both hardware -- such as CD/DVD-RAM jukeboxes, CD autoloading duplicators, towers, network attached storage devices and network servers -- and supporting storage management...

### his full

(FILE 'HOME' ENTERED AT 09:13:45 ON 06 AUG 2001)

FILE 'COMPUAB, COMPUSCIENCE, ELCOM, INFODATA, SOLIDSTATE, CONF' ENTERED AT 09:14:05 ON 06 AUG 2001

L1 2030 SEA (LONG TERM OR PERMANENT OR ARCHIV? OR MASS) (5A) (STORAGE? OR MEMORY OR MEMORIES) OR RAID# OR REDUNDANT(W)

ARRAY? (2W) (DISK

# OR DISC#)

L\*\*\* DEL 605 S (SERVER? O R DATA OR FILE OR FILES) (10A) (BACKUP? OR

BACK? (W) U

L2 6100 SEA (SERVER? OR DATA OR FILE OR FILES)(10A)(BACKUP? OR BACK?(W) UP OR REDUNDAN? OR DUPLICAT? OR ALTERNAT? OR

REPLACEME

NT? OR SECOND?)

L3 4385 SEA (COORDINAT? OR CO ORDINAT? OR CONTROL# OR CONTROLLING OR CONTROLLED OR MANAG? OR INTEGRAT?) (5A) (PROCESSOR? OR CPU OR CPUS OR MICROPROCESSOR? OR (PLURAL? OR MULTIPLE OR

MULTI) (3A) (D

ATA OR STORAGE OR ELEMENT# OR DRIVE#))

L4 14605 SEA (COMPAR? OR MATCH? OR NOTE? OR NOTING OR RECORD? OR LIST?
OR INDICAT? OR REGISTER? OR MARK? OR EXAMIN?) (5A) (TIME# OR
HOUR? OR MINUTE? OR INTERVAL?) OR TIME(3A) SIGNAL?

L5 121672 SEA CAPACIT? OR LIMIT? OR MAXIMUM?

L6 124 SEA (TAPE? OR CARTRIDGE?) (5A) (LIBRAR? OR COLLECTION? OR CAROUSEL? OR AUTOMATION SYSTEM?)

L7 48343 SEA ROBOT? OR CYBERNET? OR AUTOMATE?

L8 0 SEA L1 AND L2 AND L3 AND L4 AND L5 AND L6 AND L7
L9 0 SEA (L1 OR L2) AND L3 AND L4 AND L5 AND (L6 OR L7)
L10 0 SEA (L1 OR L2) AND L3 AND L4 AND L5

L11 1 SEA L1 AND L2 AND L4 AND L5

D L11 BIB, ABS

L12 8 SEA L1 AND L2 AND (L3 OR L4) AND (L5 OR L6 OR L7)

L13 7 SEA L12 NOT L11

L14 4 DUPLICATE REMOVE L13 (3 DUPLICATES REMOVED)

D L14 BIB, ABS 1-4

FILE HOME

FILE COMPUAB

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE COMPUSCIENCE

FILE LAST UPDATED: 31 JUL 2001 <20010731/UP>

FILE COVERS 1972 TO DATE.

FILE ELCOM

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE INFODATA

FILE LAST UPDATED: 31 JUL 2001 <20010731/UP>

FILE COVERS 1976 TO DATE.

FILE SOLIDSTATE

FILE COVERS 1981 TO 13 Jul 2001 (20010713/ED)

FILE CONF FILE LAST UPDATED: 03 AUG 2001 <20010803/UP>
FILE COVERS 1976 TO DATE.

=>

L11 ANSWER 1 OF 1 COMPUAB COPYRIGHT 2001 CSA

AN 2000:7004 COMPUAB

TI Redundant optical storage system using DVD-RAM library DIG PAP IEEE SYMP MASS STORAGE SYST

- AU Tanabe, Takaya; Takayanagi, Makoto; Tatemiti, Hidetoshi; Ura, Tetsuya; Yamamoto, Manabu
- CS NTT Integrated Information & Energy Systems Lab, Tokyo, Jpn
- SO (19990000) pp. 80-87. IEEE. PISCATAWAY, NJ, (USA).
  Meeting Info.: 16th IEEE Symposium on Mass Storage Systems, 7th NASA
  Goddard Conference on Mass Storage Systems and Technologies-'Informationbased Access to Storage: The Foundation of Information Systems'. San
  Diego, CA, USA. 03/15-03/18/99.

DT Book

TC Conference

FS C

LA English

AB A Digital virtual Disk (DVD) random access memory (RAM) Redundant Array of

Inexpensive Libraries (RAIL) optical storage system has been developed and

tested at NTT Integrated Information & Energy Systems Laboratories. The RAIL storage system incorporates multiple DVD libraries that consist of dual DVD-RAM drives. Each DVD library utilizes a single mechanical robot picker for media loading and unloading. The current capacity of the single sided and single layered DVD optical media used in that system is 2.6 gigabytes. To increase the reliability of stored data and at the same time to eliminate the need for read after write verification, a process that can double the recording time, a

RAID 4 algorithm has been implemented in the control unit of the RAIL storage system. Data sent by the host are transferred to a control unit, that stripes data over five data groups plus one parity unit. The striped and parity data are sent to individual libraries and written to DVD media. This system writes and retrieves storage data with a transfer rate of approximate 6 MB/sec, using write and read control methods that minimize data striping overhead. Other performance factors that affect

the

transfer rates are the striping size and the number of drives used in the RAIL system. Experimental results indicate that stripe sizes of 32 to 64 KB are sufficient to achieve high throughput. In addition, the transfer rates showed no further increase when the number of 1 drives exceeded eight. This RAIL optical storage system which offers data redundancy can be used for networked multimedia applications.

=>

L14 ANSWER 1 OF 4 COMPUAB COPYRIGHT 2001 CSA 2000:10271 COMPUAB ΑN ΤI High-speed optical library system using digital versatile disk random access memory Tanabe, Takaya; Ura, Tetsu; Yamamoto, Manabu AU NTT Cyber Space Lab, Tokyo, Jpn CS Jpn J Appl Phys Part 1 Regul Pap Short Note Rev Pap, (20000000) vol. 39, SO no. 2 B, pp. 920-924. ISSN: 0021-4922. DΤ Journal FS LA English A high-data-transfer-rate optical storage system using a redundant array of inexpensive libraries (RAIL) has been developed and tested. It incorporates multiple libraries, where each library consists of dual digital versatile disk (DVD) random access memory (RAM) drives and a single robotic hand and holds 2.6 GB DVD disks. To increase the reliability of data storage and at the same time to eliminate the need for read-after-write verification, which doubles the recording time, a redundant array of inexpensive drives (RAID) 4 algorithm is implemented in the control unit of the storage system. Data sent by the host is transferred to a control unit, which stripes the data into five data groups plus one parity unit. The striped and parity data is sent to individual libraries and written to the DVD disks. This system writes and retrieves data with a transfer rate of approximately 6 MB/s, using write and read control methods that minimize the data striping overhead. This reliable library system can be used for networked multimedia applications. COPYRIGHT 2001 CSA L14 ANSWER 2 OF 4 COMPUAB DUPLICATE 1 93:13834 COMPUAB AN TΙ Spacecraft mass storage optical disk system. DIG PAP IEEE SYMP MASS STORAGE SYST. ΑU Hines, Glenn D.; Jurezyk, Stephen G.; Hodson, Robert F. CS NASA Langley Research Cent, Hampton, VA, USA SO (1993) pp. 285-290. IEEE, IEEE SERVICE CENTER, PISCATAWAY, NJ (USA). Meeting Info.: the 12th IEEE Symposium on Mass Storage Systems. Monterey, CA, USA. 04/26-29/93. ISBN: 0-8186-3460-X. DT Book TC Conference FS C T.A English AB Mass memory systems based on re-writeable optical disk media are expected to play an important role in meeting the data-system requirements for future NASA space flight missions. NASA has established a program to develop a high-performance (high-rate, large-capacity ) optical disk recorder. An expandable, adaptable system concept is proposed based on disk Drive modules and a modular Controller. Drive performance goals are ten gigabyte capacity, 300 megabit per second transfer rate, 10 super(-12) corrected bit error rate, and 150 millisecond access time. This performance is achieved by writing eight data tracks in parallel on both sides of a 14-inch optical disk using two independent heads. System goals are 160 gigabyte capacity, 1.2 gigabit per second data rate with concurrent I/O, 250

millisecond access time, and two- to five-year operating life on orbit. The system can be configured to meet various applications. This versatility is provided by the Controller. The Controller provides command

processing, multiple drive synchronization, data buffering, basic file management, error processing, and status reporting. Technology developments, design concepts, current status including a computer model of the system and a Controller design are presented.

L14 ANSWER 3 OF 4 COMPUAB COPYRIGHT 2001 CSA DUPLICATE 2

AN 93:11118 COMPUAB

TI Spaceflight optical disk recorder development. PROC SPIE INT SOC OPT ENG.

AU Jurczyk, Stephen G.; Hines, Glenn D.; Shull, Thomas A.

CS NASA Langley Research Cent., Hampton, VA, USA

SO (1993) vol. 1785, pp. 34-44. INT SOC FOR OPTICAL ENGINEERING, BELLINGHAM, WA (USA).

Meeting Info.: Enabling Technologies for High-Bandwidth Applications. Boston, MA, USA. 09/08/1992.

DT Book

TC Conference

FS C

LA English

AB Mass memory system based on rewriteable optical disk media are expected to play an important role in meeting the data system requirements for future NASA spaceflight missions. NASA has established a program to develop a high performance (high rate, large capacity) optical disk recorder focused on use aboard unmanned Earth orbiting platforms. An expandable, adaptable system concept is proposed based on disk drive modules and a modular controller. Drive performance goals are 10 gigabyte capacity, 300 megabit per second transfer rate, 10 super(-12) corrected bit error rate, and 150 millisecond access time.

This

performance is achieved by writing eight data tracks in parallel on both sides of a 14 inch optical disk using two independent heads. System goals are 160 gigabyte capacity, 1.2 gigabits per second data rate with concurrent I/O, 250 millisecond access time, and two to five year operating life on orbit. The system can be configured to meet various applications. This versatility is provided by the controller.

The controller provides command processing, multiple drive synchronization, data buffering, basic file management, error processing, and status reporting. Technology developments, design concepts, current status including a computer model of the system and a controller breadboard, and future plans for the drive and controller are presented.

L14 ANSWER 4 OF 4 COMPUAB COPYRIGHT 2001 CSA DUPLICATE 3

AN 82:13569 COMPUAB

TI Mass storage systems and evolution of data center architectures.

AU Miller, S.W.

CS SRI Int.

SO COMPUTER., (1982) vol. 15, no. 7, pp. 16-19.

DT Journal

FS C

LA English

AB The investment that an enterprise makes in data processing equipment was

once concentrated in the data center. The architecture of that data center  $\vec{\ }$ 

is now changing into what might better be called a collection of cooperating subsystems that encompasses the geographic extent of the enterprise. The typical central data repository in the DP world is the magentic tape library. The general paradigm is that the tape reel is fetched from the repository and mounted on a dirve. Then data are moved from the tape volumes to secondary storage (i.e., disks) for processing. During the last three decades, considering the density of storage on the tape and the speed with which

we

move tape, tape technology has become only a few hundred times better.

The

architectures of information processing systems have been evolving toward a high-speed local network permitting ready communication among multiple hosts, multiple peripheral controllers, and concentrator/manager processors for terminals and/or connections to other systems.

=>